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Honoring the sixty-sixth anniversary of the establishment of the Navy Nurse Corps on 13 May 1974, *U.S. NAVY MEDICINE* salutes the valued officers of the Navy Nurse Corps. Our front cover displays typical scenes well photographed in 1972 at the Naval Hospital, Camp Lejeune, N.C.: LTJG Yvonne M. Bradshaw comforts a responsive pediatric patient (left); LTJG Mary A. Valentine makes an intravenous flow adjustment in the coronary care unit (upper right), and; ENS Kandace D. Adams works the night shift as a ward charge nurse (lower right).

The photo on page 2, taken in Sep 1973 during the Surgeon General's visit to the Family Practice Clinic at Nav Hosp Pensacola, Fla., shows VADM D.L. Custis, MC, USN (left) commiserating with Christopher Martino (right) over black eyes in general, and Christopher's in particular. Christopher and the clinic were both one year old at the time. First, second, and third-year Family-Practice residents are involved at the clinic where well over 1100 Navy families enjoy consulting their own family physician.—PAO, Nav Aerosp & Reg Med Cen Pensacola, Fla.



from the Chief

Last March, I spoke of our need for being cost effective. While this emphasis is assuming a more important and dominant role in our programs, I want to reemphasize that cost effectiveness cannot, and must not usurp the quality of care we extend to our patients. There are those who are now saying we place too much emphasis on quality, and that in order to bring costs down, "adequate is good enough." Webster defines adequate as "barely satisfactory — acceptable but not remarkable." As far as Navy Medicine is concerned, adequate is not and never will be acceptable! Our patients are to continue to receive the best care that the state of the art permits today. This is the Medical Department's position, cost effectiveness notwithstanding.

It should not be inferred that we are not fully aware of, and do not appreciate the hard implications of this position. Quite the contrary. It will not be an easy task to maintain quality health care while experiencing reduced levels of resources, and reaching for cost effectiveness to boot. It may even appear to some to be a near impossible goal to achieve, but achieve it we must. There is no acceptable alternative. Our patients have a right to quality care, our professional conscience demands it, our traditions ensure it, and our survival as a viable system depends on it.

How do we achieve this near impossible task? During the next several years we will search for, evaluate, and adopt new systems and methods of not only health-care delivery, but effective management processes as well. In the meantime, we must use every means available *today* to provide quality health care; I will address two that readily come to mind.

First, the most productive, readily available means to achieve this goal can be found in the *thousands of professional, highly skilled, trained and dedicated people* (military and civilian) who constitute the Navy Medical Department. Few health-care systems are as fortunate as ours (and our sister Services), to have such a cogent means for accomplishing "impossible goals." However, as the thrust and force of every successful organization stems from dedicated and concerned people, so the negative forces which mitigate against progress and achievement do stem from the few who are unconcerned and uncommitted. In my travels during my first year in office, I have noticed that we may have a sufficient number of the latter to perhaps slow down, if not impede the achievement of continued quality care in an austere environment. I do not intend to let these few people make this happen. Everything possible will be done at the Bureau level to encourage such people to rededicate themselves, so that they can make meaningful contributions to the

attainment of our goal of quality care. I ask each officer, enlisted, military and civilian member in each command, in a supervisory or other position of responsibility, likewise, to exert every positive leadership principle and technique, to ensure that every member of our Medical Department is giving his or her full measure of effort; we can tolerate no less if we are to realize our goal of quality care in an austere environment.

Secondly, the other means for achieving this, and other goals can be categorized as "change." You know as well as I, that health-care systems cannot survive in a static environment. We must change — our Navy is changing, our Nation is changing, and our health-care world is changing. For instance, nearly two dozen bills concerning National health insurance are pending before both Houses in Congress. The proposed legislation reflects a variety of concepts, supported by a number of groups with a stake in the \$95 billion health-care industry. A few short years ago, one would be hard put to find even the phrase, "National Health Insurance" in the Congressional Record. Whether we believe it or not, this shift of emphasis is impacting directly and indirectly on our health-care-delivery system. Since we are not an island unto ourselves, we too must change, and particularly if we are to maintain quality care in an austere environment. For instance, regionalizing the Navy Health-Care-Delivery System was an event whose time had come. That change, if effectively supported by all hands, is designed to maintain quality health care. Relieving physicians and dentists of administrative duties is putting scarce professionals back in patient care, a change brought on by the shifting emphasis of National health policies. However, there are a few who cannot accept these and other changes, and thus do not give them full support. If we are going to provide quality health care while meeting the challenges facing Navy Medicine in the next several years, we need not necessarily welcome change, but we all must support change and do everything possible to make it work in the best interest of our patients.

In all of our choices in the next several years, we will be involved in the management of change. In this regard, every member of the Navy Medical Department in a leadership role will have three fundamentally different objectives, two of which may seem contradictory: the preservation and perpetuation of our system; organizational control; and the generation of desirable, orderly change. This conflict is best expressed by Lyndall F. Urwick in his book, *Leadership in the Twentieth Century*:

"Because foresight is required, the leader always has to be doing two apparently incompatible things. He has to encourage his supervisors to promote order, to maintain established routines; at the same time, he has to protect from their wrath the originals, the innovators, the crazy people, to whom order and routine present a challenge to change. It is from this, often regarded (as the) lunatic fringe, that the organization is most likely to derive something original.

"This conflict is one of the great paradoxes. The organization that cannot resolve it will either go bankrupt tomorrow because it is too disorganized to get the job done, or it will go bankrupt in five years or less because it is still trying to use the same old methods and sell the same old goods or services."





DEPARTMENT OF THE NAVY
BUREAU OF MEDICINE AND SURGERY
WASHINGTON, D.C. 20372


ANNIVERSARY GREETINGS FROM DIRECTOR, NAVY NURSE CORPS

It is with genuine pleasure that I extend my warmest personal greetings and best wishes as we approach the sixty-sixth anniversary of the Navy Nurse Corps.

We reflect with pride on the milestones in our history, on the leadership ability, personal contributions and laudable achievements of our members. Throughout the years, our talented, versatile, dedicated and hard-working members have been our greatest and most indispensable asset. Individuals working independently or as members of a team have forged the Navy Nurse Corps into a strong, efficient organization and a vital part of the Navy's health care delivery system. We are proud to be active participants with the members of the Medical Corps, Dental Corps, Hospital Corps, and Medical Service Corps, in their concerted efforts to fulfill the mission of the Navy Medical Department.

I am confident that through our constant and deliberate efforts we will continue to meet our obligations and achieve our continuing goal of providing optimum patient care to our Navy and Marine Corps personnel and their families.

My sincere good wishes to each of you for a happy and progressive year ahead.


ALENE B. DUERK
Rear Admiral, NC, USN

If They Could See Us Now—

Navy Nurse Corps

1908—1974

Individually, men and women still claim the right to fudge just a little about their age, but collectively the Navy Nurse Corps is proud to admit to 66 years.

It was 13 May 1908 when Congress first approved the organization of a group of 20 women (The Sacred Twenty) to aid the Navy's sick and wounded. At that time the women were neither commissioned nor uniformed, but specifications for a uniformity of dress were issued from time to time by the Navy Surgeon General. Not until 1941 did a prescribed uniform for members of the Navy Nurse Corps appear in the Navy Uniform Regulations. In the pictorial review which follows, the evolution of the modern uniform unfolds.

But what of the persons inside these trappings? By their own unselfish, dedicated, and entirely voluntary service, Navy nurses have strengthened and bolstered the Medical Department in times of war, transition, turmoil and peace. Ever responsive to the changing needs and persuasions of Navy Medicine, Nurse Corps officers have earned respect and recognition by their competent performance, indomitable spirit and resolution. As a Corps, their impact and advancement stem not from a prolonged clamor for equal rights, but rather from an endless succession of professional feats and enduring commitments.

Reflecting upon her notable predecessors, our Nurse Corps Editor once remarked, "If they could see us now!" . . . We think they can, and always did. In you they are right proud.



YEARS AGO.—Mrs. Lenah H. Sutcliffe Higbee was the second Superintendent of the Navy Nurse Corps, serving in that capacity from 1911 to 1922. Here she wears the outdoor uniform with standing collar. The Corps device is worn on both sides of the collar. A stiff felt hat tops off the ensemble. (Some women with flair would opt for the hat today — Ed.)



NURSE CORPS LINE-UP.—Navy nurses wore this long white indoor duty uniform in 1914.



ALL CLOAKED UP.—The long blue cloak, once a symbol of the nursing profession, was the Navy's answer to the energy crisis of the early 1900s. Miss Josephine Beatrice Bowman (left) became the third Superintendent of the Navy Nurse Corps in 1922.



THE MAXI LOOK.—On board the USS *George Washington* in 1918, two Navy nurses wore the coat-cape uniform with gold foul anchor device on both sides of the collar.



SEEING DOUBLE.—Miss Betty Mayer, assistant superintendent of nurses from 1923 to 1930, models the white indoor duty uniform (left) and cap with cape (right). This uniform was adopted 22 Jan 1923. With slight variation in collar and material, and great variation in skirt length, it is still the authorized uniform for female Nurse Corp officers today.



DRESS UNIFORM.—This blue outdoor dress uniform was worn by Navy nurses from 1923 to 1942.



NOSTALGIA NAVY-STYLE.—The war years brought new uniforms with shorter skirts. In 1944, Navy Nurse Corps indoctrinees lined up at Nav Hosp Portsmouth, Va., to model the variations in uniform worn by Navy nurses during the 1940s.

FLIGHT NURSE.—In 1944, Navy flight nurses wore this practical slack suit of finely woven, heavy gray cotton broadcloth. Ranks and Corps insignia were worn on the right and left sides of the collar, respectively, and the coveted wings were worn over the left breast. A jockey type cap with visor was also worn. Low-heeled, black Oxford-type shoes were the prescribed footwear.



THE FIFTIES.—The 1950s saw the birth of the "bucket" hat. Flight nurses wore a forest-green uniform. The gray-and-white seersucker dress could be worn as an indoor working uniform or, with a change of hats and the addition of a tie, for street wear. (Chicago Tribune photo.)



THE SIXTIES.—A light blue dacron uniform was introduced in the 1960s. It was the beginning of the end for the traditional blue cape.



THE "NEW" LOOK.—There was a new look in Navy nurses when men joined the Nurse Corps in the mid 1960s. Male nurses wear the uniform authorized for all male Naval officers. This tropical white uniform converts to the indoor working uniform for male nurses, by removing the shoulder boards and adding collar devices.



THE SEVENTIES.—In the 1970s, Navy female nurses moved into short skirts and pantsuits. Here RADM Robert Williams, Jr., MC, USN (left), CO, NNMC, introduces comedian Bob Hope to Navy staff nurses (CDR H.I. Furmanchik, left; ENS L. Sinowski, right), at the National Naval Medical Center, Bethesda, Md.



ALL PRESENT AND ACCOUNTED FOR.—The ambulatory-care nurse practitioner's continuing education program includes three hours of seminars and conferences each week. Each nurse is responsible for conducting a seminar.

Ambulatory-Care Nurse Practitioner Program

**By CDR Angeline G. Liakos, NC, USN,
Director, Ambulatory Care Nurse Practitioner Program,
Naval Regional Medical Center, San Diego, Calif. 92134.**

The changing economic base for health services (as exemplified by medicare, health maintenance organizations, and other prepaid health insurance plans) has made health care financially feasible for more people than ever before. Comprehensive health insurance plans, however, do not assure the availability of sufficient numbers of professionals for the delivery of health care services.

Medical and nursing leaders are confronted with the problem of bringing better health care to a continually increasing number of patients. One highly promising solution to this problem is for nurses to function at

maximum capability as partners in the health team responsible for delivering comprehensive care.

In 1970 a committee of thirteen doctors, thirteen nurses and two hospital administrators was appointed by the Secretary of the Department of Health, Education and Welfare (HEW) to study possible extended roles of nurses. The committee's report in 1971 stated: "One of the most important opportunities for change in the current system of health care involves altering the practice of nurses and physicians so that nurses assume considerably greater responsibility for delivering primary health care services." The committee used the term "primary care" to describe a patient's initial contact with a health-care system; in this initial contact a plan of treatment would be determined, and responsibility

The opinions and assertions contained in the above article are those of the author and do not necessarily represent official views of the Navy Department, or the naval service at large.

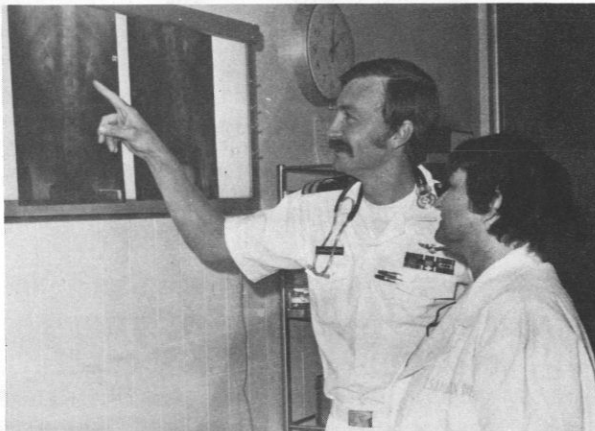
assigned for the continuum of patient care, including maintenance of health, evaluation and management of symptoms, and appropriate referrals.

Navy nurses are responding to the challenge of assuming greater responsibility with enthusiasm and imagination. One manifestation of the creative change now taking place in Navy nursing is the Ambulatory-Care Nurse Practitioner Program instituted last year at Naval

Regional Medical Center (NAVREGMEDCEN), San Diego, Calif. Development of this new program was prompted by growing recognition of the importance of nurse-physician collaboration in extending increased health-care services to ambulatory patients. Given proper training and supervised experience, and working interdependently with physicians, Navy nurses are demonstrating their ability to assist such patients.



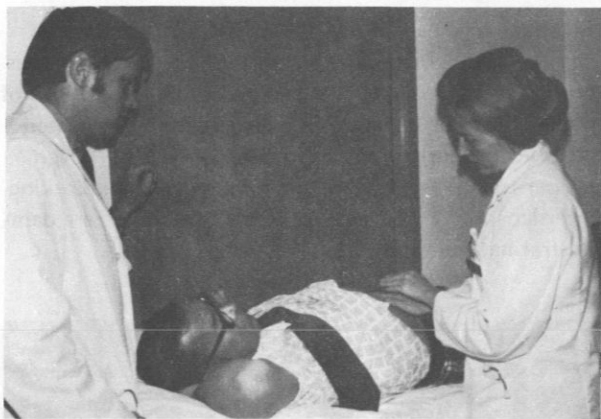
PRIMARY SCREENING.—LCDR Claire Cronin, NC, USN (left), a nurse practitioner, helps expedite patient care by assisting with the primary screening of a patient.



X-RAY STUDIES.—LT David L. Vandenberg, MC, USN helps LCDR Betty Thomas, NC, USN to identify radiological features of a pyelogram study performed on one of her patients.



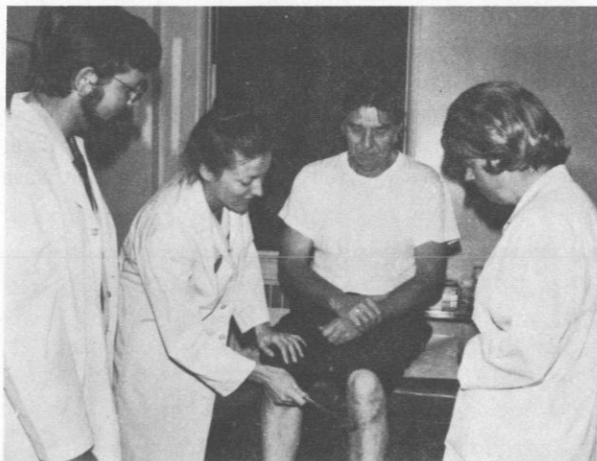
CHECK OUT.—Under the supervision of LCDR Ronald P. DiGiacomo, MC, USN (right), LTJG Wendy Bregar, NC, USNR (left) checks the status of a cardiac patient. (Photo by Joanne Kane.)



SPECIALTY CLINICS.—Hematologist LCDR Robert F. Granatir, MC, USN (left) teaches LTJG Marilyn Stryker, NC, USNR (right) the proper technique of palpating the abdomen. Assignment to such specialty clinics provides the nurse practitioner with a variety of learning opportunities. (Photo by Joanne Kane.)



CLINICAL CLUES.—LTJG Marilyn Stryker, NC, USNR examines smear specimen taken from an inpatient. Nurse practitioner students rotate through the dermatology, urology, neurology, and surgery clinics.

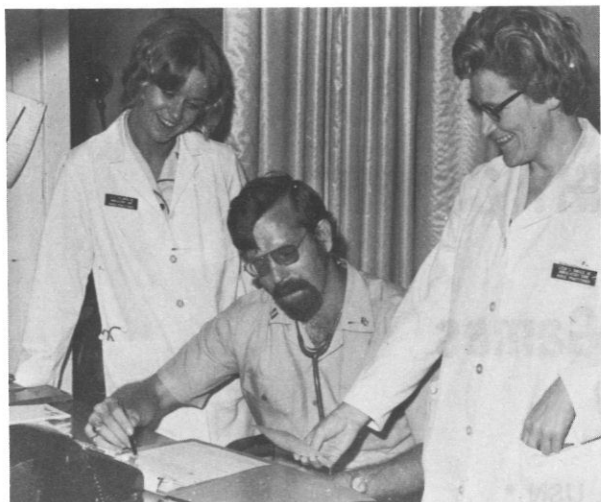


JUST TESTING.—LT Dianne Sentinella, NC, USN (second from left) elicits a neurologic response from her patient for LCDR Roger E. Fitzpatrick, MC, USN (far left), and LCDR Claire Cronin, NC, USN (right). After two years of clinical experience, the nurse practitioner will be eligible to apply for national certification by the American Nurses' Association.

The Ambulatory-Care Nurse Practitioner Program is designed to offer the education and experience required by a nurse to deliver primary health care, as defined by the HEW committee. During the six-month program of formal classes and supervised clinical experience, the training includes: assessment of the health status of individuals; response to illness; compliance with, and response to prescribed treatment; screening of patients to gather data which will be evaluated together with the physician; ordering selected diagnostic procedures; and managing selected patients in association with, and under the supervision of a medical officer (entailing physical examination, determination of clinical diagnosis, prescription of medication, and referral when indicated).

During the first two months of the initial program, 27 physicians gave medical lectures and demonstrations. CDR Martin Passaglia, MSC, USN and LT Douglas Call, MSC, USN, physiologists from NAS Miramar, Calif., helped teach 22 hours of anatomy and physiology. LT Darrell Snook, MSC, USN taught applied pharmacology. Under the very capable leadership of Shirley Kashoff, Ph.D., ambulatory-care nurse practitioner students considered ways of identifying and coping with inherent stresses in their new extended role. Other topics discussed included microbiology, problem-oriented medical records, and interviewing techniques.

With guidance and support from the medical staff, the nurse practitioners received additional experience



PROGRAM PROTÉGÉS.—Under the guidance of Medical Corps officers like LCDR Roger E. Fitzpatrick, MC, USN (center), nurse practitioners LT Lila Fillmore, NC, USN (left) and LCDR S. Knouse, NC, USN (right) gain experience in the effective use of problem-oriented records.

in taking histories and conducting physical examinations of inpatients and outpatients. A four-month clinical rotation was implemented to provide experience in: otolaryngology, gynecology, internal medicine, adolescent medicine, ambulatory care, and the emergency room. Students could also elect to rotate to the dermatology, urology, neurology, and surgery clinics. Personnel from other services such as pharmacy, laboratory, and radiology also supported the program.

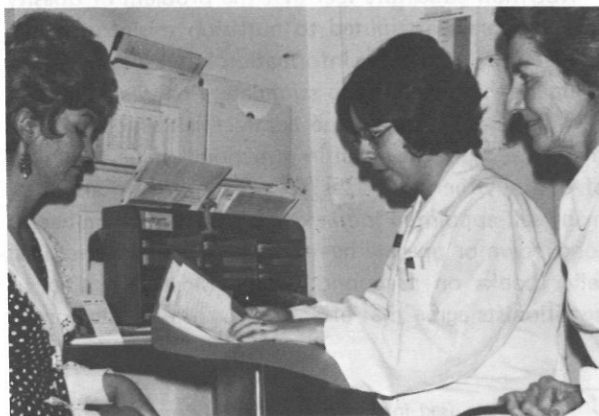
The first nurses to emerge graduated from the program in formal ceremonies conducted on 11 Jan 1974. The new ambulatory-care nurse practitioners are now assigned to the Ambulatory Care Service of NAVREG-MEDCEN San Diego, and to three of the annex dispensaries within the regional command.

The nurses' educational continuum will include three hours of seminars and conferences to be conducted each week. Further expansion of nurses' duties, to include the role of the family-care nurse practitioner, is envisioned. After the successful completion of two years of clinical experience, the nurse practitioners will be eligible to apply for national certification by the American Nurses' Association.

The Ambulatory-Care Nurse Practitioner Program at San Diego is under the direction of CDR Angeline G. Liakos, NC, USN. CAPT John Schanberger, MC, USN is medical adviser. The program has been enthusiastically supported by the medical and nursing staff of NAVREGMEDCEN San Diego, and has won patient acceptance at the Medical Center.



PROGRAMED PRACTITIONERS.—CDR Angeline G. Liakos, NC, USN (center), director of the Ambulatory-Care Nurse Practitioner Program, reviews the programed instruction on otitis media with LT Deborah Sherman, NC, USN (left) and LT Lila Fillmore, NC, USN (right). (Photo by Joanne Kane.)



PRIMARY HEALTH CARE.—Licensed vocational nurse (LVN) Mrs. O. Myers (right) will prepare patient for examination by LTJG Margaret Willey, NC, USNR (center). The objective of the Ambulatory-Care Nurse Practitioner Program is to provide the nurse with the education and experience she needs to deliver primary health care. (Photo by Joanne Kane.)

PEDIATRIC WEIGHT CONTROL:

Fun and Games

By LCDR Phyllis Barkus, NC, USN,*

Mrs. Cynthia Brach, MA, Registered Dietitian,** and

LT Betty Starr, MSC, USNR.†

INTRODUCTION

The incidence of obesity in children has been increasing steadily since 1950. The data suggest that obese children may not outgrow their fatness, but rather that the problem may become worse with age.¹ In fact, severe obesity among adults has generally been found to have had its onset in childhood.

Nutrition educators feel that the problem of obesity may be partly attributed to nutrition misinformation. One source of such misinformation is television advertisement that attempts to stimulate a child's appetite for "goodies," such as the commercial which asserts that a candy bar is equal in nutritional value to a glass of milk. Other obstacles to good nutrition are the many self-appointed food experts who lecture on health foods, own or operate health-food stores, or write best-seller books on pseudonutrition. Most reputable nutritionists agree that effective nutrition education is

the best method for counteracting such misinformation.²

Until April 1973, weight reduction classes at the Naval Regional Medical Center, Long Beach, Calif., were designed for the overweight adult, and only individual diet instructions were given to overweight children. We learned, however, that the majority of overweight adults who came for classes had been overweight since childhood. The Food Management Services and the Pediatric Department therefore decided to establish an informative, interesting, and entertaining program for obese children, which would entice them to attend each meeting and motivate them to lose weight. Two classes a month were scheduled: one session for children new to the program, and another session to provide continuing education and learning experiences for children already enrolled in the program.

CLASS METHODS

Since most of the children in the program are of school age, classes are scheduled from 1600 to 1700 hours. For the first class, three members of the staff who volunteer to be group leaders change from their military and work uniforms to Levis, T-shirts, and

Materials used in the Weight-Control Program herein described (lesson plans, advertising poster, anthropometric chart, "Slender" card, and classroom skit) are available upon request from: Food Management Services, Naval Regional Medical Center, Long Beach, Calif. 90801.

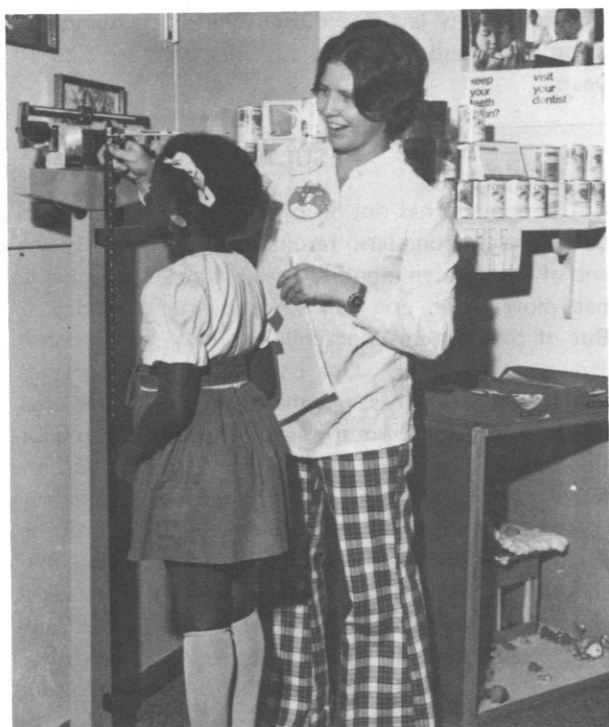
*LCDR Barkus is currently doing Navy-sponsored graduate work in pediatric nursing at the University of Utah, Salt Lake City.

**Mrs. Brach is a staff member at the Naval Regional Medical Center Long Beach, Calif. 90801.

†LT Starr has been released from active duty.

1. Read MS and Heald FP: Adolescent obesity: a summary of a symposium. J Am Diet Assoc 47:411, 1965.

2. Wagner MG: The irony of affluence. J Am Diet Assoc 57:311, 1970.



A-WEIGH WE GO.—Each child's height and weight are recorded on an anthropometric chart during the first session of the Pediatric Weight Control Program at NAVREGMEDCEN, Long Beach, Calif. (Photos by HM2 J.C. Spencer)

tennis shoes. Leaders, children, and parents all wear name tags which identify them by their first name only.

The class begins with the question, "Do you know why you are here and what you all have in common?" The answer to this question is, "Yes. We are all too fat." Next the group is told that they will learn: (1) what calories are; (2) where calories come from; (3) why we need calories; (4) the causes of weight gain, and the effect of weight gain on the body; (5) the basic four food groups and food-exchange lists, and; (6) how to plan meals using the food-exchange lists.

To keep the children's attention, the leaders take turns discussing these topics. The children are then asked to bring in six pictures of food items that they clip from newspapers and magazines. The children identify the exchange list that each food picture represents. Food-exchange lists and meal patterns are distributed for home use.

At the conclusion of the first class, each child's weight and height are recorded on an anthropometric chart,³ to ascertain the child's degree of obesity and

approximate ideal weight. The findings are then explained to the child and his parents, who are also shown how to use the anthropometric chart.

Children are expected to keep a record of their progress. At each return visit, the child is weighed to determine whether weight loss or gain has occurred. A poster representation of a horse race is used to dramatize weight loss; as each child loses weight, his horse is moved further along the track. For each one-quarter pound of weight loss, the child receives a 25¢ token. But if his weight has increased, a 25¢ token must be returned for each one-quarter pound gained, and the child's horse is moved in reverse. Every three months an auction of toys and other useful items is held. The children may use their tokens to bid for whatever they want. This auction provides the children with a tangible incentive to lose weight, and amass tokens.

In the second session, we reinforce the use of the food-exchange lists by playing a game called, "Slender." "Slender" is played like "Bingo," with items of food being called instead of numbers. The game continues until every child has won a prize.

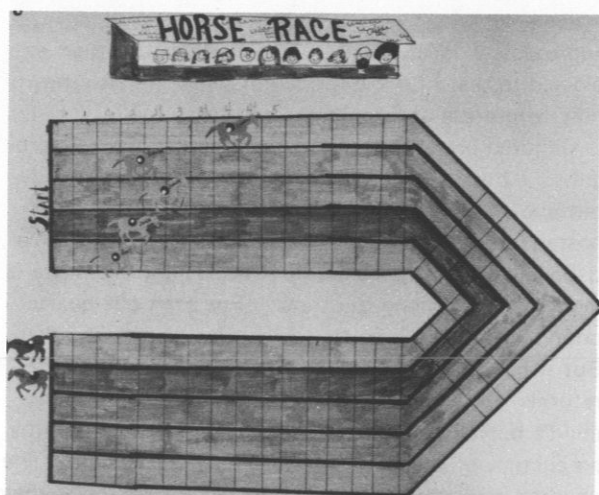
The third session is called "Creative Salad Making." A variety of raw vegetables is collected, including cabbage, cauliflower, celery, cucumbers, lettuce, mushrooms, bell peppers, radishes, zucchini squash, cherry tomatoes, and turnips. Each child washes, cuts, and prepares two or three of the vegetables. Prepared and homemade diet salad dressings are also available. The children and their parents are encouraged to taste all the vegetables and dressings.

The fourth session, "Exercise Your Weigh Down," is very popular. The objective is to demonstrate that



ON STAGE.—Children enrolled in the Pediatric Weight Control Program work with their parents and group leaders on a skit which they will present at a Christmas party. The skit presents basic principles of nutrition in an interesting and amusing way.

3. Anthropometric Chart. The Children's Medical Center, Boston, Mass.



RACE TOWARDS SLIMNESS.—This horse-race poster helps children in the Pediatric Weight Control Program to monitor their weight loss. The horses move ahead whenever a child loses one-quarter pound of weight.

exercise can be fun, and that it has an important role to play in maintaining good health. Three teen-agers help out with this particular program by demonstrating a few clever dance steps called the "Monster Mash." A volleyball net (which Special Services was kind enough to lend) is set up and the children play several games; the last game pits the children against the parents — and guess who usually wins!

One of the principles we try to reinforce is that water is the best thing to drink after any physical activity. But, as a reward, eight flavors of noncaloric diet soft drinks are also served.

In the fifth session, we again play the game of "Slender." This game serves a dual purpose: it helps us to ascertain how much the children have learned, and the prizes give the children positive reinforcement of their new knowledge.

The authors served as leaders of the first group of classes, and wrote a short skit which the children enacted before their parents and friends as part of their

Christmas party last December. The skit is humorous, informative, and appeals to students from age 5 to 13 years.

RESULTS

The program has not been in effect long enough to determine the long-term results of this effort. By the end of the first ten months, three of the 20 participants had moved, and one had stopped attending classes. But of the 17 remaining children, only two had not shown a weight loss. One child had lost 5½ pounds and grown two inches. At the end of 1973, the total weight loss for the group was 39 pounds. As an additional benefit, one mother has lost 17 pounds and one father has decided to go on a diet with his daughter.

All of the sessions have been well received, and the parents have been very cooperative in bringing the children to class. The program appears to be a success, and will be continued as a regular service of the Long Beach Naval Regional Medical Center. Any new ideas or suggestions that may be useful in planning future sessions would be appreciated.

SUMMARY

Because of the increasing number of obese children, many of whom become obese adults, a long-term group program of weight reduction for children was initiated in 1973 in the Pediatric Clinic of the Naval Regional Medical Center, Long Beach, Calif. This program offers continuous nutrition education, along with immediate reward for actual weight reduction. Although the children are primarily interested in improving their personal appearance, the lessons they learn about good nutrition will help them to maintain a lifelong program of weight control. Hopefully, the children will absorb and profit from the information received on the causes of weight gain, methods for maintaining ideal body weight, and fundamental principles of effective, sensible, weight reduction. 🍀

ARMED FORCES DAY

By proclamation of President Nixon, the third Saturday of each May has been designated Armed Forces Day, to enhance public understanding and appreciation of the Armed Forces as protectors of freedom at home and abroad.

Secretary of Defense James R. Schlesinger has directed that special tribute be paid, on May 18, to the personal sacrifices which men and women in uniform continue to make in the line of service. 🍀

CAREER PLANNING for

MEDICAL OFFICERS in the NAVAL RESERVE

By CAPT Khlar E. McDonald, MC, USNR-R

Training and Support Unit 3-55,

Naval Reserve Center, Jamestown, New York.

INTRODUCTION

The initial step in career planning in the Naval Reserve community is affiliation with an active reserve component. Today there is ample opportunity for a Reserve medical officer, upon his release from two years of active service, to affiliate with an interesting program in the Air, Surface, Seabee, Marine Corps, or Reserve Medical Company.

Many rewarding contributions can be made by the physician who is enthusiastic, patient, and dedicated to the preservation and welfare of our Nation. A deep sense of patriotism is essential.

The United States and its territories are geographically divided into Naval Districts. One of the primary tasks of each Naval District is the continued development, maintenance, and support of a responsible Naval Reserve Program. The location of the nearest reserve facility and the available opportunities in medical aspects of the Naval Reserve Program may easily be ascertained by contacting the office of the District Medical Officer (DMO) in the District Headquarters. Often local reservists can be of some assistance in locating the nearest facility. A visit to the area facility will usually provide the necessary information, and an opportunity to affiliate in an active reserve status.

At this point the many advantages of being a member of an active reserve component might be considered.

The following benefits are readily apparent: 1) education and training in many areas; 2) association with leaders of the area, immediately providing both social and business contacts; 3) opportunity for further promotion in the Navy; 4) retirement program; 5) survivor's protection while in a duty status; 6) individual medical care for illness or injury while in a duty status; 7) income tax deduction for involved travel and incurred expenses; 8) a monthly pay check while in a pay status; 9) \$15,000 life insurance coverage while in a duty status, and; 10) pride and satisfaction in the knowledge that Naval Reservists are ready, willing, and able to assist in the defense of the Nation against all aggressors.

Depending upon individual qualifications and interests, the types of billets available to the Reserve medical officer are varied and often flexible. In the Training and Support Units he may function as a support General Medical Officer (GMO), and in a Staff advisory capacity. In the District he may function as the Commandant's Representative at an adjacent medical school. In this capacity his major task is that of informing embryo physicians of the opportunities in military medicine, and actively recruiting young physicians for Navy Medical programs. As an interested medical officer he may opt to supervise the training of hospital corpsmen in any unit to which a reasonable number of corpsmen are attached. Flight Surgeons are continuously involved in the Reserve Air Program. Seabee and Marine units welcome interested Reserve medical officers to assist them. There are 23 organized Reserve Medical Companies in existence today, offering opportunities in both pay and nonpay status, ranging from

The opinions and assertions expressed in the above article are those of the author and are not to be construed as official, or necessarily reflecting the views of the Navy Department or the naval service at large.

clinical specialty service in a hospital or dispensary environment, to special medical projects including current training in the military aspects of Navy Medicine.

CAREER PLANNING

As in any other successful career, a career in the Naval Medical Reserve requires careful planning, with constant reevaluation. Physicians today have many family, social, and professional obligations that compete for their time and knowledge. The successful Career Reserve Officer must include in his planning these basic, minimum requirements: 1) regular participation, 2) active duty for training, 3) continued educational growth and development, and 4) leadership development and experience. The advantages of such a planned career are: the respect of your community and less military-minded associates; the gratitude of the United States Navy, and; hopefully, regular promotions with a guaranteed retirement benefit.

Regular Participation.

The initial step is the association with an active reserve program. Regular attendance at the established meetings of the unit which you join is of utmost importance. This affords the Reserve medical officer both the opportunity to perform a regular useful function, and to become acquainted with the problems and mission of his particular unit. Today the performance of medical duties required in the normal administration of a given unit is basic, but the interested medical officer can and should become involved in the military program. The individual expertise which he brings to the unit can be valuable in creating an enthusiastic, positive attitude that generates success in any viable organization. Physicians are noted for their industry; this quality will affect your Navy associates if you infect them with your knowledge and enthusiasm. Positive leadership is readily exerted by participation in the training programs of the unit wherever possible, and by promoting the Navy in your community. Military bearing, and conformity to the uniform and other basic regulations are, of course required. The grass-roots public still respect and favor the smartly dressed Naval officer.

Active Duty for Training.

Active duty for training (ACDUTRA) is essential for a successful naval career. This provides an opportunity for the reservist to remain current on what is happening in the Naval establishment. It also provides the chance to serve, and to make a meaningful contribution

to the Navy Medical Corps. If the junior officer is not familiar with ships and the medical problems of the fighting Navy, a period of active duty for training spent on a ship at sea will readily broaden his Navy experience. Duty at naval hospitals, and participation in the many special projects and schools provided for Naval Reserve medical officers are also extremely rewarding; such practical experiences extend the qualifications of the medical officer. Serious consideration should be given to this 14-day period of active duty. Early in his career, the Reserve medical officer should develop a long-range plan for ACDUTRA, so that his overall experience will include sea duty, naval hospital and dispensary service, exposure to the administrative aspects of military medicine, duty with the Marines and Seabees, exposure to aviation and space medicine, and Staff or War College duty.

Continued Education.

Today postgraduate education is just as important for the military career as it is for civilian practice. Upon his release from active duty the young medical officer should seriously consider graduate training in his particular area of interest, whether it be family medicine, general medicine or its subspecialties, general surgery or its subspecialties, anesthesiology, obstetrics and gynecology, etc. Board certification in the chosen area of interest will be important in acquiring and maintaining the desired privileges which a young physician seeks in both civilian and military environments. Many state and national organizations now require continued participation in graduate medical educational programs. With peer and hospital-utilization reviews eminent, only medical practice of measurable-standard quality will be found acceptable to society. In time of great need, the Reserve medical officers must be willing and capable of filling that need.


Leadership Development.

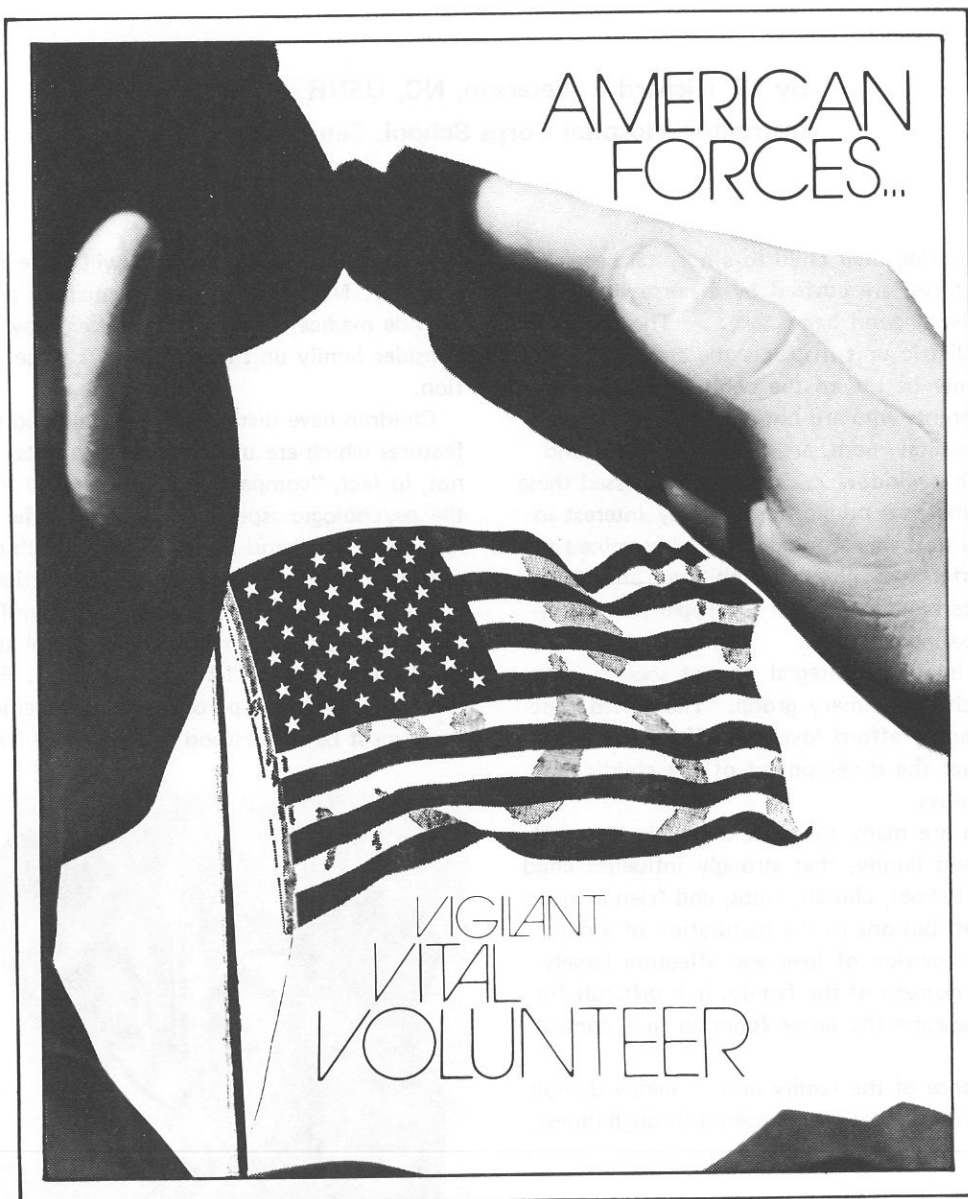
Leadership capabilities are acquired, not innate. There are abundant opportunities in the civilian medical community for the physician to nurture, test, and perfect his ability as a leader of men, in addition to his responsibility as a chief member of a medical-care team. The physician should readily accept responsibility as a member of the hospital staff and indigenous medical societies, in order to assimilate experience at the various levels of accountability in these organizations. Participation in selected community activities and organizations will provide experience beyond the medical field, and will prove both rewarding and challenging. The research and acquisition of knowledge of the elements basic to good leadership, and their judicious application,

cannot be overlooked. Knowledge and experience, coupled with hard work, inevitably generate success. There will always be an unsatiated requirement for outstanding leadership.

CONCLUSION

A medical career in the Naval Reserve should be initiated by a love of the Navy, and a desire to serve in

it. This career development must be based on a long-range viable plan that provides growth and progression, in both the military and professional aspects of the Medical Corps. Continued medical education, and the willingness to develop leadership responsibility will round out the career pattern. The usual reward for such effort and commitment, having availed oneself of the opportunity to serve, is that of profound satisfaction. 



ARMED FORCES DAY, MAY 18

Pediatric Hospitalization and Integrity of the Family Unit

By LT Richard E. Peterson, NC, USNR,
Instructor, Hospital Corps School, San Diego, Calif.

Parents who bring their child to a hospital because of failure to thrive, are advised by a nurse that their child "is finally in good hands." . . . The charge nurse of a pediatric unit instructs the staff that "children should only be hit on the behind, never on the face." . . . Parents who are not allowed to visit their child in his hospital room, are obliged to wave and gesture through a window . . . Having witnessed these disturbing events at a public hospital, my interest in the family as a unit was aroused; I was determined to explore the effects of illness on children and their parents, to determine the extent of proper nursing intervention in patient care.

The family is a basic integral unit of society, and serves as the child's primary group. The varied functions of the family afford love and affection for the child, and affect the development of the child's personality and values.

Today there are many events and people, external to the home and family, that strongly influence child development. School, church, clubs, and friends make substantial contributions to the maturation of a child. However, the provision of love and affection largely remains in the domain of the family; it is difficult for an agency to assume the latter function in a comparable manner.

The significance of the family unit is readily demonstrated when one member is endangered through illness;

the remaining family members will unite to maintain integrity. Nurses, doctors, and ancillary personnel who provide medical services for children may do well to consider family unit integrity — its value and preservation.

Children have distinctive anatomic and physiologic features which are unlike those of adults; children are not, in fact, "compact adults." Equally important are the psychologic aspects of illness for the child, who fails to comprehend the magnitude of illness and cannot understand the need for hospitalization.

Frequently parents themselves are uninformed, finding it difficult to appreciate the medical status of their child and the reason for hospitalization. Flowing from this lack of realistic perception, mixed emotions erupt; these must be understood and accepted by the nursing



BABE IN ARMS.—Secure in her refuge, the 6-month-old daughter of Mrs. Gabriela Sunga happily accepts examination of her chest by CDR Charles Reed, MC, USN in the Pediatric Clinic of Nav Hosp Great Lakes, Ill. Assisting the group is LTJG Peggy Marine, NC, USNR.

At the time when this article was prepared, LT Peterson was charge nurse of the Pediatric Ward at Nav Hosp Great Lakes, Ill.

The opinions and assertions contained herein are those of the author and are not to be construed as official, or reflecting the views of the Navy Department or the naval service at large.



I'D RATHER SLEEP.—Helping a young patient feel comfortable in the hospital is an important part of the nurse's job. Here ENS Judith Johnson, NC, USNR comforts a weary patient on the Pediatric Ward of Nav Hosp Great Lakes, Ill.

staff if good care is to be provided. In addition, nursing personnel must understand their own feelings about families. Nurses must accept the fact that the guise of parental substitute no longer constitutes a nursing role. Rather, nurses should serve as a temporary assistant to the family in returning the child to normal activity. Hopefully, nurses can persuade patients that hospitalization is necessary to allow specialized therapy not available in the home.

Children often react to illness with anger, fear, guilt, or disappointment. The course of events leading up to hospitalization often determines, or colors the feelings which they harbor or express. Consider the following example: While crossing a street he had been forbidden to cross, a child is struck by a car and sustains a fractured femur. The child may feel guilt; fear of the parent (because he violated a rule); anger at the driver of the car, and; bitter disappointment at finding himself in a strange environment, immobilized and in traction. Parental sentiments might also include anger, fear, guilt, or disappointment. Parents may feel anger toward the automobile operator, or toward the child who disobeyed; fear for the child's medical plight; guilt over breakdown in supervision of the child, and;

disappointment that the child had disregarded parental direction. Nurses must consider the needs and emotions of the entire family, in securing coordinated effort to provide optimal patient care in the hospital and at home.

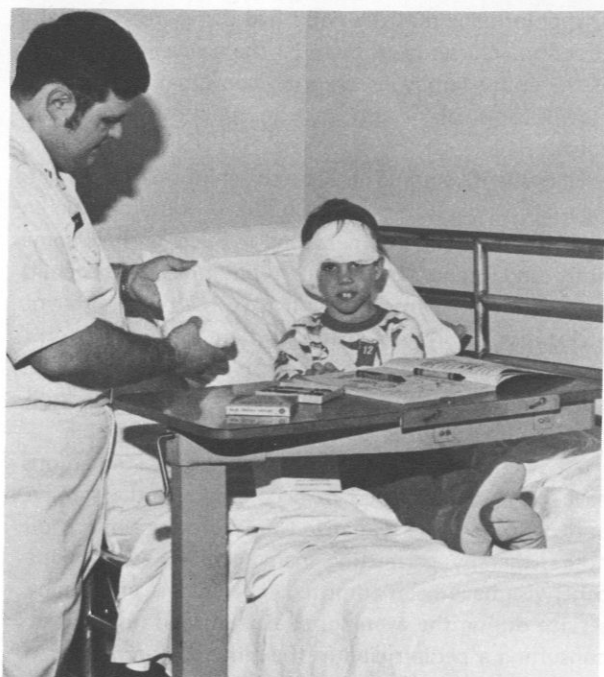
Honesty is required in a parent-child relationship, to maintain the child's trust. Children should also be entitled to trust nursing personnel. Such faith is sometimes undermined by parents who threaten the child with such statements as: "I'll have the nurse give you a shot if you don't do what I say," or, "The shot won't hurt at all." It may be difficult to achieve honest interaction while maintaining respect for the parent-child relationship, but it is possible and highly desirable.

At Nav Hosp Great Lakes, Ill., several innovations have been implemented to accommodate the family-unit concept. The Pediatric Clinic is open until 2200 hours, thereby permitting many children who might otherwise have been admitted through the emergency service during the evening, to be returned home after consulting a pediatrician in the clinic. The physician who conducts the evening pediatric clinic routinely visits the ward after clinic hours, checking further on any problems.

When children are admitted to the hospital, the family is also "admitted," and made comfortable on the ward. A short interview is conducted to determine specific factors in the individual care of the child, and the "Pediatric History" standard form is completed. The physician generally completes the admission physical examination at this time, and interviews the parents in greater detail.



CHECKING IN.—At Nav Hosp Great Lakes, Ill., ENS Bonnie Banker, NC, USNR reviews Michele White's medical history before the child is seen by a pediatrician. Michele was brought to the Pediatric Clinic by her parents, PN1 and Mrs. Howard White.



BEDSIDE VISIT.—Hospitals aren't too frightening when someone takes the time to explain things. Here LT Richard E. Peterson, NC, USNR, charge nurse on the Pediatric Ward at Nav Hosp Great Lakes, Ill., shows David Free the special kind of bandage used to protect his head.

Visiting hours have been altered to satisfy the needs of families. Pre- and postoperative visits are planned. Scheduled visiting times are 1500-1900 hours on weekdays, and 1200-1900 on weekends; families may therefore be together at mealtimes. Changes in these hours are made when necessary to accommodate family visits. During visiting hours, nurses may observe family interactions and gain valuable insight into the reactions of children and parents to hospitalization.

Parents whose children are entrusted to surgical specialty services may visit at breakfast time, when the

doctors make rounds before departing to the operating rooms, and reports of children's medical progress can be obtained during these visits. Parents whose children are hospitalized on the medical service may generally converse with the ward medical officer in the afternoon.

A written pediatric information sheet is given to each family. The sheet provides telephone numbers for the ward, so that parents may call at any time to receive a progress report. Hopefully, this policy reassures the parents that their child's condition is readily ascertained. Nurses also work with parents to educate families in providing health care at home. Keeping parents informed and involved in the child's health-care plan helps to maintain the family unit.

Classes are held for ward personnel who explore their own attitudes, as well as the attitudes of the child and his parents. Details of patient care, growth and development, and use of patient-care plans are also regularly discussed.

In summary, the pediatric staff seeks to maintain family integrity. This is accomplished by observing and understanding the family's feelings, keeping the family informed of the patient's progress, and teaching the family to care for the patient in the hospital and at home. The nurse in a starched uniform, who once whisked a child away from his parents' arms, has now been replaced by the enlightened professional who strives to unify families through empathy and care.

SELECTED BIBLIOGRAPHY

1. Blake FG, Wright FH and Waechter EH: Nursing Care of Children. 8th ed, Philadelphia, JB Lippincott Co, 1970.
2. Marlow DR: Textbook of Pediatric Nursing. 2nd ed, Philadelphia, WB Saunders Co, 1965.
3. Petrilo M and Sanger S: Emotional Care of Hospitalized Children. Philadelphia, JB Lippincott Co, 1972.
4. Winch RF: The Modern Family. New York; Holt, Rinehart & Winston Inc, 1966.

THREE NEWPORT COMMANDS CONSOLIDATED

A special consolidation ceremony marked the launching of the new Naval Education and Training Center (NETC) recently in Newport, R.I.

During the program, three commands were formally disestablished and consolidated into the new command. They were the Naval Base, Naval Station and Naval Officer Training Center.

The March 29th ceremonies marked the principal action involving Newport shore commands under the Naval Shore Establishment Realignment (SER) plan announced 17 Apr 1973.

Two other Newport commands, the Navy Public Works Center and Naval Supply Center, Norfolk, Newport Annex, will be absorbed by NETC on July 1st. — NAVNEWS, No. 0104, 19 Apr 1974.

The Craniotomy Check Sheet:

A Graph-Form Index of Clinical Evolution

**By LCDR Lawrence H. Fink, MC, USN,
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National Naval Medical Center, Bethesda, Md. 20014.**

INTRODUCTION

It is essential to the management of any patient following cerebral insult of whatever etiology (injury, hemorrhage, craniotomy), that the patient's neurologic status be periodically evaluated and recorded, and a determination made regarding the evolution of the clinical situation. In simple terms, it is necessary to know at any given moment, "How is the patient," and, more importantly "How is he as compared to a few hours ago"?

To this end, most, if not all neurosurgical services prescribe a standardized set of repeated clinical evaluations, the analysis of which provides an indication of the evolving clinical condition of any given patient. These examinations may be as cursory as checking pupillary size, Babinski's signs, and responsiveness. More

effective is the routinized evaluation of several neurologic parameters (craniotomy checks), which are listed on a printed form with space provided for recording results or symbolic notations. The so-called "Craniotomy Check Sheet" serves the purpose.

Unfortunately, the mere listing of various critical parameters to be evaluated, and checking them off, may not always provide useful information. Even more unfortunate is the possibility that nursing-service personnel (nurses, corpsmen) who are charged with the care of such patients, may continue recording isolated observations, blissfully unaware that the combination of signs being recorded indicates a seriously deteriorating clinical situation. The responsible physician may never learn of the apparent clinical deterioration until it is, perhaps too late to reverse the downward trend.

THE CHECK SHEET

To prevent this situation, we have developed a new, standardized Craniotomy Check Sheet (NDW-NNMC-

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6460/5 [Rev. 6-73]), which has been utilized satisfactorily at the National Naval Medical Center, Bethesda, Md., for the past six months. This check sheet (See Figure 1) is constructed in graph form; the various parameters to be evaluated are listed on the vertical axis, plotted against the horizontal time axis. The time scale has 24 divisions, enabling usage for a 24-hour period in the usual application (q1h craniotomy checks). These time divisions are unnumbered, however, so that observations may be recorded at any appropriate interval (e.g., q 15 min. x 6 hours, or q 2 x 48 hours), depending upon the requirements of the individual situation and the physician's discretion.

There are two major points of interest in viewing this new form. First, the various sets of clinical observations are grouped in logical sequence, and standardized terminology is used which is specifically defined, where necessary, on the form itself. Also standardized, the evaluation symbols are either defined (See Figure 2), or keyed to examples which are printed on the sheet.

Second, within each of five categories of evaluation, the single-choice options are listed in descending order with the most normal situation at the top, and the most abnormal at the bottom of the sequence. In the evaluation of the level of consciousness, for example, the five descriptive choices available to the observer begin with the normal state, "alert"; proceed through "lethargic," "stuporous," and "semi-coma"; and conclude with the most abnormal state, "coma."

Thus, at each unit of time, the observer (nurse, corpsman) is instructed to blacken a box corresponding to the observed patient response within each category. As the recording continues, these blackened boxes combine to form broad lines, the slope of which provides an immediate graphic representation — not only of the patient's status at that moment, but also of the patient's course over the entire recording period, i.e., the trend. Thus, a straight line indicates a stable clinical course, a rising line suggests an improving or resolving condition, and a falling line denotes a deteriorating condition. If several lines are falling, for example, the clinical situation is obviously deteriorating.

Muscle strength and pupillary size/reactions are recorded in the standard manner indicated on the sheet.

CONCLUSIONS

The advantages of this check sheet are real. Whether they be nurses, corpsmen, or physician's assistants who do not have the clinical expertise of the neurosurgeon or neurologist, first-line personnel are now provided with a "yardstick" by which they may evaluate their

INSTRUCTIONS

1. Chart specific numbers for: Blood Pressure, Pulse, Respirations, and Temperature, in section labelled "Vital Signs."

2. "Level of Consciousness" is determined by your observation and by the patient's response.

Alert = awake and responsive (verbal and motor)

Lethargic = sleepy or drowsy. Will awaken and respond appropriately to command.

Stuporous = not awake, but will usually respond appropriately to light pain.

Semi-Coma = not awake. Will respond purposefully to deep pain.

Coma = unresponsive or decerebrate to any form of stimulation.

3. "Strength": Record your estimate of patient's strength in response to command or pain:

0 = no function

1 = minimal function

2 = approximately ½ normal strength

3 = minimal weakness

4 = normal

GPO 863-198

Figure 2.—Additional instructions appear on the reverse side of the Craniotomy Check Sheet.

patient, not only in absolute (instantaneous) terms, but also in the more significant relative (evolutionary) terms which indicate a trend. In using this form, paramedical personnel will be less likely to miss ominous prognosticators. They will be more likely to appreciate the overall clinical situation, not only in terms of "where the patient is" at any given moment, but "where he has been," and "where he is going."

It is recognized that some may quibble with the given terminology, or the relative merits of incorporating one or another clinical parameter into this form. Nevertheless, based upon satisfactory usage and widespread acceptance of the form by those personnel involved in the care of our neurosurgical patients, this check sheet is recommended for consideration by various Naval medical centers where neurology/neurosurgery patients are treated. 🍀

Evaluation of Instruction for Hospital Corpsmen in Patient Care

By LT Virginia M. Bousquet, NC, USN,
Hospital Corps School, Great Lakes, Ill.

The hospital corpsman has for many decades cared for the sick and injured of our armed services, and their dependents. As nursing instructors, we must constantly modify and evaluate the patient-care instruction offered these young men and women in order that they may participate in, and be more responsible for the care of patients upon completion of their training program.

Every week at Hospital Corps School, Great Lakes, Ill., 70 young men and women begin 14 weeks of intensive instruction in patient care, first aid, anatomy, physiology, preventive medicine, and pharmacology. While 70 students begin, an average of 54.6 students graduate weekly to serve in our many hospitals and dispensaries.

During the 14-week period of instruction, only one and one-half weeks are spent in the hospital; the remainder of the instruction takes place in the classroom. Because so little time is spent in the clinical area, the classroom experience must be extremely meaningful and vivid. To help the students understand the material, we rely heavily on training aids and previous experiences of the instructors.

Traditionally, a nurse has been assigned to the convening company as company nurse. In this role she is responsible for teaching patient care during the 14-week period. In addition, she serves as a counselor and parent surrogate.

In an attempt to improve our patient-care instruction, we divided the six units of patient-care instruction

among six instructors, instead of having one instructor teach in all of the areas. We then decided to evaluate the effectiveness of our unit instruction, by comparison with the older teaching method.

Unit instruction offers the student an opportunity to work with six different nurses, a more realistic situation which will be prevalent when the students leave school. In addition, the nurses offer a variety of experiences which add interest to the course material. Finally, it was hoped that improved unit instruction might be reflected in higher student grades as the nurses became progressively more familiar with their units, enhancing lessons, audiovisual aids, and their own teaching skills.

A survey and analysis of available literature on teaching methods provided little information appropriate to our particular situation. Except for the much reiterated necessity to continually redefine the knowledge, judgment, and skills required for nursing personnel, and various methods of accomplishing this (from observation, to devising a systematic approach), few conclusions can be drawn. Reference to any measuring device which would effectively evaluate our students' performance could not be found.

METHOD

In order to evaluate the students' performance during 14 weeks with the same instructor, as compared with the performance of students taught by six different nursing instructors for 14 weeks, four companies having one instructor and eight companies having unit instruction were selected for comparative study.

The opinions and assertions expressed in the above article are those of the author and are not to be construed as necessarily reflecting official views of the Navy Department, or the naval service at large.

The students selected for the study had to have begun their careers with the company convening week, and could not have been placed in an accelerated status because of previous hospital or medical experience acquired before entering the Navy. Students who had been set back were not used in the study, because of the many variables that are too difficult to control, which had been responsible for set-back action. The total sample involved 660 students.

The companies were compared on the basis of their GCT/ARI scores — the military equivalent of the IQ test. Comparison of average GCT/ARI scores was made to determine if there were a significant difference between the intelligence potentials of the 12 groups which might, alone, account for any improvement in student performance. (See Table I).

Secondly, patient-care scores obtained by these students, under the two types of instruction were examined, to determine if there had been any distinctive improvement in the student performance. (See Table II).

Thirdly, the student-skill practices were addressed. Students demonstrated procedure skills in giving bed baths; measuring body temperature, pulse, respiratory rate, and blood pressure (TPR and BP); and in applying surgical dressings. Demonstrated skills were evaluated on a four-point scale to determine if student performance had improved as the instructor gained experience in repeatedly demonstrating and setting up the skill practice.

These three particular phases of study deal with the only objective areas which we were adequately able to test. Though extremely subjective, the last or fourth area studied was the consensus of the nurses' own opinions, comments, and criticisms of unit instruction. The latter consideration served to solicit ideas for improving the instructional experience of corpsmen, and for accepting or rejecting unit instruction as a concept of teaching.

ANALYSIS OF DATA

Examination of the GCT/ARI scores revealed a low company average of 106.24, and a high company average of 116.94. The average for the twelve companies was 112.13. This indicated that no significant difference between the groups could account for improved performance on the basis of innate intelligence. Table I shows the distribution by companies.

Secondly, analysis of the patient-care examinations was conducted to determine if an improvement in test scores, in a comparison between the two groups, could be demonstrated. (See Table II).

TABLE I
COMPARISON OF GCT/ARI SCORES FOR
12 STUDENT GROUPS

	Company No.	Average GCT/ARI Scores for Company Groups
With Company Nurse	27	116.94
	28	110.64
	29	112.22
	30	106.24
	Average:	111.51
With Unit Instructors	31	115.11
	32	115.97
	33	112.90
	34	109.00
	35	111.46
	36	113.12
	37	113.00
	38	108.96
	Average:	112.44

TABLE II
COMPARISON OF PATIENT CARE (PC) SCORES

	PC No.1	PC No.2	PC No.3	PC No.4	PC No.5
Company Nurse	87.23	81.82	82.38	83.17	80.92
Unit Instructors	89.15	84.49	85.33	83.13	83.83

From a study of Table II one can appreciate the consistent improvement demonstrated in all patient-care (PC) tests of students who received unit instruction, except in the case of PC No.4, where company-nurse instruction had a slight advantage. On the whole, students definitely improved under the unit-instructors concept. PC No.3 and No.5 were significant at the 0.05 level.

Another subjective aspect of consideration was that of eliciting student opinion as to whether they preferred having one instructor for 14 weeks, or the six instructors encountered in unit teaching. Students were cautioned that personalities should not be allowed to enter into their decision. This not only allowed students an opportunity to express their individual feelings but, since they were the recipients or our instruction,

their preference for a particular method of instruction could be germane to the effectiveness of that method.

Thirdly, skill practices were examined to determine if student performance increased as instructors gained experience in demonstrating skills through repetition. It was felt that repetition became an important factor when we consider that the company nurse teaches each skill once in 14 weeks, while the unit instructor repeats each skill every two weeks. To emphasize the importance of having the instructor repeat teaching of skills at frequent intervals, we divided the unit instruction into two parts. It was considered that the first four companies would have had instructors who had not performed these skills in a period of 8-14 weeks. The next four companies had instructors who had repeated these teaching skills during the previous four weeks. If our contention is correct, that instructor performance improves with practice, then student performance should also show improvement. Table III reveals the data obtained, utilizing a four-point scale for grading specific skills.

TABLE III
COMPARISON OF DEMONSTRATED STUDENT SKILLS

Student Groups	Bed bath	TPR	BP	Surgical Dressing
Company Nurse	2.2	2.3	2.2	2.2
Unit Instructors, Co. 31-34	2.5	2.4	2.7	2.3
Unit Instructors, Co. 35-38	2.6	2.7	2.6	2.4

As can be seen in Table III, significant improvement can be demonstrated in the first two skill practices in a comparison between the company nurse and the unit-instructor methods of teaching, and the performance levels of students tend to improve as the instructors repeat the teaching of skills, in all areas but blood-pressure measurement.

The last phase of study addressed the instructors' own opinions of the two methods of instruction. The only definite information obtained indicated that instructors were either very much for, or very much against a particular method. The greatest complaint

lodged against unit instruction by the nurses was that, because of the short time they are permitted with each student, an average period of one to three weeks, they simply cannot get to know each student and thus cannot effectively ascertain specific abilities or lack of ability. All nursing instructors acknowledge that grades do not necessarily determine how effectively a student will care for patients.

The student-opinion survey as to which method of instruction they preferred showed that 68% favor unit instruction, 20% are opposed to unit instruction, and 11% have no preference.

CONCLUSIONS

Although this study does demonstrate a marked improvement in selected phases of student performance achieved by unit instruction, when compared with student performance following instruction by a single company nurse, this, in itself, is not the most important revelation. A more significant feature is that education can and must undergo change. Evaluation of the results of change should determine its effectiveness. The effects will be reflected in student performance, and more specifically, in the student ability to care for patients.

The large unit of data gathered for this study at Hospital Corps School Great Lakes, will be the subject of further investigation and exploration. Are we teaching what the student really needs to know, for example, in order to care for patients effectively? Secondly, are the students motivated to a greater extent when instructed by six nurses, rather than one? Finally, can we predict before a student begins this intensive course whether or not he will succeed?

SELECTED REFERENCES

1. Lonberten E: Changes in practice require changes in education. *Am J Nurs* 66:1784-1788, Aug 1966.
2. Rudhen G and Hamister S: Evaluation of a training program for nursing assistants. *Nurs Outlook* 21:404-407, Jun 1973.
3. Krueger G: Training nursing assistants for a sub-professional role. *Ment Hyg* 54:152-154, Jan 1970.

The Endodontic Significance of the Mesiobuccal Root of the Maxillary First Molar

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Dentists have been treating maxillary first molars endodontically for years under the general assumption that these teeth have three root canals. However, despite the excellent overall success rate for endodontic cases, the mesiobuccal root of the maxillary first molar has always carried an excessively high failure rate. This has been due to the frequent occurrence of a second separate canal in this root, which is rarely located and filled. Consequently, a thorough knowledge of root-canal anatomy is essential for ultimate endodontic success.

Our current concept of root-canal morphology is based upon the exhaustive work of Hess,¹ who made vulcanite corrosion preparations of 3,000 permanent teeth. Of 513 maxillary first and second molars, Hess found 46% with three canals and 54% with four canals. Many authors^{2,3,4,5} cite these frequencies when reporting on root-canal anatomy. However, these results are inaccurate because Hess incorrectly considered the maxillary first and second molars to be identical.

Although the occurrence of two root canals in the mesiobuccal root of the maxillary first molar is mentioned in most endodontic and dental anatomy textbooks, words such as "may have," "occasionally," or

"infrequently" are employed; often the possibility of two canals is not even mentioned. Reports of recent investigations^{6,7,8,9} indicate that the incidence of two canals at the apex of this root ranges from 14 to 42%. Since the literature is so inconclusive and variable, and since the maxillary first molar is endodontically one of the most commonly treated teeth, it was decided to conduct a detailed investigation of the morphology of the root canals of the mesiobuccal root of the extracted human maxillary first molar. From the various methods advocated for the anatomic examination of root canals, a standardized technique utilizing transparent specimens was selected.

METHOD AND MATERIALS

One hundred maxillary first molars were decalcified in 5% hydrochloric acid. Upon completion of this process, the teeth were washed in tap water and placed in 5% potassium hydroxide solution for 24 hours. They were then injected with hematoxylin dye, and dehydrated in successive solutions of 70%, 95%, and absolute alcohol for periods of five hours each. Finally, the specimens were placed in crystal-clear liquid plastic casting resin,* and were completely cleared within 12 hours.

The opinions or assertions contained herein are those of the author and are not to be construed as official, or reflecting the views of the Navy Department or the naval service at large. References to commercial supplies and sources are intended to serve reader convenience, and do not imply product endorsement by the U.S. Navy or the naval service at large.

*Fibre-Glass-Evercoat Co., Inc.; Cornell Rd., Cincinnati, Ohio.

RESULTS

The transparent specimens were examined under the dissecting microscope, and the following features were recorded: the number and types of root canals, the number and location of apical foramina and transverse anastomoses, and the frequency of apical deltas. These data are summarized in Tables I and II.

TABLE I

CLASSIFICATION AND INCIDENCE OF MESIOBUCCAL ROOT CANAL TYPES IN THE MAXILLARY FIRST MOLAR			
Canal Configuration	Type I	Type II	Type III
Incidence (percent)	45	37	18

The canal configurations of the mesiobuccal root of the maxillary first molar can be classified into the following three types:

Type I — A single canal from the pulp chamber to the apex

Type II — Two separate canals leaving the pulp chamber, but joining short of the apex to form one canal

Type III — Two separate and distinct canals, from the pulp chamber to the apex

Of the 100 teeth studied, 45% had a Type I configuration, 37% possessed a Type II configuration, and 18% showed a Type III configuration.

DISCUSSION

Considering Type I and Type II cases together, it is noted that 82% of the roots displayed a single apical foramen. If the single canal in Type I cases, and one of the two canals in Type II cases were treated endodontically, and were properly instrumented and filled, the chance of success would be excellent. This is because of the low incidence of apical deltas and collateral ramifications in these situations. Nevertheless, it is in the best interest of the patient that the dentist fill as many of the canal spaces as can be found clinically.

All Type II cases consisted of a larger buccal canal and a smaller canal located palatal to the former, which merged at a point located from one to four mm from the apex. These situations are best treated by instrumenting, filling the buccal canal to the apex, and filling the palatal canal to the point where it joins the buccal. This is because the buccal canal is the one with straight-line access to the apex.

In all Type III cases, both canals must be adequately sealed in order to achieve success. It was interesting to note that both canals do not always terminate at the same level in the root. The more buccally placed canal is always larger and wider, whereas the more palatally situated canal is shorter and narrower, and may, in fact end in the middle-third of the root. This is due to the fact that in certain instances the mesiobuccal root tends to bifurcate, thereby displaying two root apices which resemble the situation presented in the mesial root of the mandibular first molar. The relationship must be remembered when one fills these canals because it is difficult to see, in a roentgenogram, a second canal in the mesiobuccal root of maxillary

TABLE II

MORPHOLOGY OF THE MAXILLARY FIRST MOLAR MESIOBUCCAL ROOT											
Number of Teeth	With Lateral Canals	Position of Lateral Canals			Transverse Anastomosis between Canals	Position of Transverse Anastomosis			Position of Apical Foramen		Apical Deltas
		Cervical	Middle	Apical		Cervical	Middle	Apical	Central	Lateral	
100	51	13	16	71	52	10	75	15	24	76	8

molars. This is due to the very small width of the second canal, and its close proximity to the larger canal. Consequently, to accomplish proper filling of the more palatal canal, one has little more than the patient's pain reaction for use as a guide. Furthermore, because of the high incidence of two canals in this root, wisdom would dictate a greater opening of the access cavity toward the mesial aspect in order to facilitate the search for the second canal. Its orifice is usually found just palatal to the orifice of the main mesiobuccal canal.

Sometimes failures of treatment occur despite rigid adherence to basic treatment principles.¹⁰ When either pain or periapical breakdown is noted following apparently effective endodontic treatment, the possible presence of a second canal should be considered before the tooth is condemned, or surgical intervention is scheduled. If an apicoectomy and reverse fill become necessary, a complication may arise if a bifurcated canal is present; surgery may cause a single apical foramen ultimately to become two separate foramina. Results will be poor if the second canal is not routinely looked for at the time of surgery, owing to the high incidence of double canals in this tooth. Once the dentist becomes aware of the tendency for bifurcated and double canals to occur in the mesiobuccal root of the maxillary first molar and the possible added complications of apicoectomy, endodontic procedures on this root will ultimately be more successful.

SUMMARY

One hundred maxillary first molars were decalcified, injected with dye, cleared and studied. The canal configurations of the mesiobuccal root were categorized as

follows: 45% had a single canal, 37% presented two canals which merged toward a single apical foramen, and 18% exhibited two distinct canals with separate apical foramina. A knowledge of these variations will assist the dentist in reaching proper conclusions in the diagnosis and treatment of endodontic cases.

REFERENCES

1. Hess W: Anatomy of the Root Canals of the Teeth of the Permanent Dentition. Part I, pp 32-35, New York, William Wood & Co, 1925.
2. Mueller AH: Morphology of root canals. J Am Dent Assoc 23:1698-1706, 1936.
3. Green D: Morphology of the pulp cavity of the permanent teeth. Oral Surg 8:743-759, 1955.
4. Skillen WG: Morphology of root canals. J Am Dent Assoc 19:719-735, 1932.
5. Sommer RF, Ostrander FD and Crowley MC: Clinical Endodontics. 3rd ed, p5, Philadelphia, WB Saunders Co, 1966.
6. Weine FS, Healey HJ, Gerstein H and Evanson L: Canal configuration in the mesiobuccal root of the maxillary first molar and its endodontic significance. Oral Surg 28:419-425, 1969.
7. Dornelles P: Consideracoes anatomicas sobre a conformacao interna da raiz mesiovestibular do primeiro molar superior permanente. Rev Gaucha Odontol 7:35-38, 1959.
8. Pineda F: Roentgenographic investigation of the mesiobuccal root of the maxillary first molar. Oral Surg 36:253-260, 1973.
9. Green D: Double canals in single roots. Oral Surg 35:689-696, 1973.
10. Seltzer S and Bender IB: Cognitive dissonance in endodontics. Oral Surg 20:505-516, 1965. ☞

MEDICAL AUDIT SYSTEM STUDIED AT TWO NAVAL HOSPITALS

Naval Hospitals Pensacola, Fla., and Portsmouth, Va., will participate in a pilot study of a computerized medical-care-audit system. The study will begin 1 Apr 1974. It is designed to provide the Navy Bureau of Medicine and Surgery with information which will be used to study hospital practice, and to evaluate the quality of care as reflected in medical records and review utilization.

The two hospitals will use the Professional Activity Study — Medical Audit Program system sponsored by the Ann Arbor, Mich., Commission on Professional and Hospital Activities.

The purpose of the Professional Activity Study is to provide an overall display of hospital practice from a one-sheet abstract of information contained in medical records submitted by participating hospitals. Medical Audit Program reports submitted by the hospitals will aid in auditing medical care and defining continuing medical education needs. — PAO, Nav Aerosp and Reg Med Cen, Pensacola, Fla. ☞

An Outbreak of Respiratory Disease Misdiagnosed as an Adverse Drug Reaction in a Naval Recruit Population

By CAPT D.F. Hoeffler, MC, USN,††
E.J. Sullivan,* and
CAPT C.H. Miller, MC, USN.†

Benzathine penicillin G (Bicillin) is one of the most commonly used penicillin derivatives. It is frequently administered parenterally in a dose of 1.2 million units as prophylaxis against streptococcal infection and recurrent attacks of rheumatic fever.¹ Reported adverse responses to benzathine penicillin G include anaphylaxis, morbilliform and urticarial skin eruptions, serum sickness, and pain at the injection site.²⁻⁴ The incidence of all toxic and allergic reactions to the penicillins is estimated to be in the range of 1-8% depending on the penicillin derivative prescribed, the duration of drug usage, and the population studied.⁵⁻⁷

Prophylactic penicillin has been used routinely at the Recruit Training Command, Great Lakes, Ill., since the late 1950s, and has been shown to be of value in

aborting seasonal epidemics of streptococcal disease.⁸ Naval recruits receive benzathine penicillin G intramuscularly during their second week of training provided they have no history of penicillin allergy. The reported incidence of benzathine penicillin G reactions in these young men is estimated at about 1%.

We had previously suspected that many nonallergic recruits were being diagnosed as "allergic to Bicillin" without an adequate medical justification. An epidemic of "Bicillin reactions" in two recruit companies led us to investigate other possible etiologies for the observed symptoms. This paper reports the findings of that investigation, and suggests that the alleged "Bicillin reactions" were due to an epidemic of acute respiratory disease (ARD).

BACKGROUND

The Recruit Training Command, Great Lakes, Ill., is one of the Navy's three recruit-training facilities. Young men reporting there for training range in age from 17-22 years. For the most part they are natives of the northeastern and midwestern United States. The recruits are assigned to companies, each of which is

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composed of 50-70 men. Paired companies, known as "sister companies" are berthed in adjoining open-bay barrack compartments. The first week of training is devoted to military orientation, medical-dental screening, and mental and physical evaluation. During this period trainees receive diphtheria-tetanus, influenza, group C meningococcus, and types 4 and 7 adenovirus vaccines. At the end of the second week of training, recruits without a history of penicillin allergy are given 1.2 million units of benzathine penicillin G intramuscularly.

Previous studies have shown that recruits have a marked prevalence of acute respiratory disease (ARD) with a peak incidence during the first four weeks of training.^{9,10} It has been further observed that more than 20% of recruits may have rhinovirus and adenovirus infections during the first week of training.¹¹ Streptococcal infection, as judged by positive throat cultures occurs in 1.1% of incoming recruits, and in 0.5% of recruits who are graduating.¹²

MATERIALS AND METHODS

Study Population. In late June, 1973, the Field Laboratory, Naval Medical Research Unit (NAMRU) No. 4 notified the Epidemiology Division that a large number of acutely ill men were reporting to sick call from two "sister companies." The recruits' symptoms occurred 24 hours after the two companies had received their benzathine penicillin G injections, and were thought to be due to an adverse drug reaction. There were 56 men in the first company and 58 men in the second. A questionnaire was used to determine the incidence of symptoms among all 114 men, and the presence or absence of fever (oral temperature greater than 100°F) was recorded. A systematic sample of 10 men from each company was selected for laboratory evaluation. These 20 men had clinical symptoms representative of those experienced in the total population of the two companies.

Virus Isolation. Specimens were collected within 36 hours of the onset of clinical symptoms. Throat swabs were obtained from each of the 20 men in the sample population. Rectal swabs were collected from all ten men in the first company, and from six of ten men in the second. The specimens were immersed in veal infusion broth (Difco) supplemented with 0.5% bovine albumin. Aliquots were inoculated into duplicate tubes containing HeLa and primary rhesus monkey kidney cell cultures. One set of tubes was incubated stationary at 36°C, and the other rolled at 33°C. Two 14-day passes were completed before a specimen was designated as negative. Adenoviruses isolated in HeLa cells

were typed by microtechnique,¹³ using 20 antibody units of hyperimmune rabbit serum. Throat swab specimens that yielded adenovirus were treated with 50 antibody units of hyperimmune type-specific rabbit sera to detect the presence of rhinovirus upon reinoculation. Enteric-like agents isolated from throat swabs, in HeLa cells rolled at 33°C, were passed until sufficient virus was present to give a 4+ cytopathogenic effect within 48-72 hours. These virus pools titrated 1×10^4 , or greater per ml, and were used in all identification tests. Acid sensitivities were determined in microplates using pH 3.0 and 7.0 buffers.¹⁴ The tests were evaluated at three and six days, when the cytopathogenic effect in control buffer (pH 7.0) was complete. A 2 log₁₀ reduction in titer, in pH 3.0 buffer, was considered indicative of acid lability and characteristic of rhinovirus-like organisms. Standard methods used to differentiate H and M strain rhinoviruses indicated that the isolates belonged to the H group. The isolates were then typed by microplate neutralization tests using 32 — 100 tissue culture infective doses (TCID₅₀) of virus against 10-20 antibody units of hyperimmune bovine and guinea-pig serum. Antisera to 41 rhinovirus types were available.

Serology. Blood specimens were obtained at the time of the initial interview. A second specimen was drawn three weeks later. Fifteen matched pairs of sera were available for evaluation. Complement fixation tests were performed on all specimens using adenovirus group antigen. Paired sera were also tested against the rhinovirus isolates using homologous and heterologous neutralization techniques. The neutralization tests were done in microplates using HeLa cells. Serologic evaluations were made when virus back titrations were recorded between eight and 16 TCID₅₀. Men from whom no rhinovirus was isolated were similarly examined for the presence of rhinovirus antibodies. A fourfold, or greater rise in complement fixation or neutralization antibody titer, between the initial and subsequent serum specimen, was interpreted as serologic evidence of infection (seroconversion).

RESULTS

Clinical. Clinical symptoms were present in 100% of the men in both companies. Similar illness was reported by the company commanders and their assistants, none of whom had received benzathine penicillin G. Table I summarizes the clinical symptoms reported by the companies. The data are distributed similarly in both groups of men, and suggest an epidemic of acute respiratory disease (ARD) rather than an untoward drug response as was originally suspected.

TABLE I

DISTRIBUTION OF CLINICAL SYMPTOMS AMONG TWO COMPANIES OF NAVY RECRUITS FOLLOWING A SINGLE INJECTION OF BENZATHINE PENICILLIN G

Symptom	Company 1 (n = 56)		Company 2 (n = 58)	
	Number	Percent	Number	Percent
Fever	29	52	24	41
Headache	34	61	35	60
Myalgia/Arthralgia	50	89	50	86
Vertigo/Dizzy	35	63	40	69
Sore Throat	36	64	34	59
Cold/Runny or Stuffy Nose	36	64	50	86
Nausea	7	12.5	3	5
Diarrhea	9	16	0	0
Soreness of Injection Site	56	100	58	100
Urticaria/Morbilliform Eruption	0	0	0	0

Virus Isolation. The isolation data for the 20-man sample are detailed in Table II. Adenovirus was recovered from the throat of two recruits, and from the rectum in nine recruits. Rhinovirus was isolated from 13 throat swabs. As would be expected, no rectal isolates of rhinovirus were obtained. Although some heterologous crossing occurred with the bovine antisera to rhinovirus types 3, 5, 31, 32 and 42, all the isolates proved to be serologically like rhinovirus type 14.

Serology. The summary of the serologic findings on 15 pairs of sera are seen in Table III. No antibody rises to adenovirus were seen in the complement fixation tests. Ten of 13 recruits with rhinovirus isolates seroconverted to their homologous viral isolate. Extensive heterologous rises indicated that the infecting viruses were of a common type. Serum pairs were available in five of the seven patients from whom no rhinovirus was recovered. In three of these, seroconversion to one (or more) rhinovirus isolate was noted. The remaining two patients had preexisting antibodies to rhinovirus.

In collating the laboratory data we note that 13 of 15 (86%) pairs of sera showed heterologous rises to

rhinovirus isolates prevalent in the sample population. Rhinovirus was recovered from the throat of 10 of these 13 men. Three men from whom rhinovirus was not recovered also seroconverted to type 14 virus. There were no seroconversions to adenovirus in the men studied.

DISCUSSION

This paper recounts an incident in which the manifestations of an acute respiratory illness among naval recruits were mistaken for an adverse reaction to penicillin. The clinical and laboratory findings presented support the hypothesis that the symptoms were probably due to rhinovirus (type 14) infection. Recovery of adenovirus from the throat of two men in the sample population may indicate that they were in the early stages of infection with wild strains of that agent. Rectal adenovirus isolates would be expected in this group of men since they had been recently immunized with live oral attenuated adenovirus vaccine.¹⁵ The failure of any member of the study group to seroconvert to adenovirus, however, makes it unlikely that this agent

TABLE II

VIRUS ISOLATES FROM THROAT AND RECTAL SPECIMENS, IN SAMPLE GROUPS FROM TWO COMPANIES OF NAVAL RECRUITS, FOLLOWING A SINGLE INJECTION OF BENZATHINE PENICILLIN G

<i>Company</i>	<i>Specimen Source</i>	<i>Number</i>	<i>Rhinovirus</i>	<i>Adenovirus</i> 4 7 4&7	<i>Rhinovirus &</i> <i>Adenovirus</i>	<i>No Isolate</i>
1	Rectal	10	0	4 1 1	0	4
2	Rectal	6	0	2 1 0	0	3
1	Throat	10	7	0 0 0	0	3
2	Throat	10	6	0 2 0	0	2

TABLE III

THE SEROCONVERSION AND VIRUS ISOLATION DATA ON SAMPLE GROUPS FROM TWO COMPANIES OF NAVAL RECRUITS WHOSE SYMPTOMS WERE ALLEGEDLY DUE TO A SINGLE INJECTION OF BENZATHINE PENICILLIN G

<i>Serologic Category</i>	<i>Virus Group Category</i>			
	<i>Rhinovirus Isolates</i> (n = 5)	<i>Adenovirus Isolates</i> (n = 2)	<i>Adenovirus & Rhinovirus Isolates</i> (n = 8)	<i>Neither Virus Group Isolated</i>
Rhinovirus Seroconversion (n = 13)	2	1	8	2
Adenovirus (CF) Seroconversion (n = 0)	0	0	0	0
Did not seroconvert to adenovirus or to rhinovirus (n = 2)	0	0	0	2
Paired sera not available for examination (n = 5)	3	1	0	1

was responsible for the clinical illness observed in the two companies.

It is important for medical personnel who see recruits to accurately differentiate between acute respiratory disease (ARD) and untoward reactions from vaccines and medications. The unjustified diagnoses of "penicillin allergy" among recruits ill with ARD preclude future use of the penicillins in the allegedly sensitive individuals. Further, the diagnoses are recorded in the servicemen's health records, and are mistakenly counted among the new allergic incidents in the medical statistics of the Navy.

Allergic and toxic side effects of the penicillins include anaphylaxis, maculopapular rashes, urticaria, serum sickness, gastrointestinal upsets, and toxic bone marrow responses. Respiratory manifestations are not usually associated with penicillin reactions.²⁻⁸

In refining one's diagnostic technique it may be of use to recall that Navy recruits exhibit a high incidence of ARD during the first four weeks of training, and that these illnesses occur at a time when routine immunizations and penicillin prophylaxis are being administered. A high index of suspicion on the part of physicians and hospital corpsmen, and awareness of the unique epidemiologic environment of the recruit camp will be helpful in more accurately separating adverse drug and vaccine responses from acute respiratory disease.

SUMMARY

Two companies of Navy recruits were investigated following reports that they had exhibited a high incidence of "allergic" reactions following an injection of benzathine penicillin G for streptococcal prophylaxis. Both companies were given a medical questionnaire, and ten symptomatic men from each company were sampled for virus isolation. Fifteen paired sera from these 20 men were evaluated for virus seroconversions. The clinical symptoms, and the frequency of rhinovirus isolation and seroconversion in the sample, supported the authors' hypothesis that this outbreak of "drug reactions" was due to an epidemic of acute respiratory disease. The unsupported diagnosis of penicillin allergy may unjustly preclude the future use of these drugs in allegedly sensitive individuals. Medical personnel should be wary of making overly hasty appraisals of "adverse drug reactions" among naval recruit populations.

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REFERENCES

1. Fendrick GM: Streptococcal Sore Throat, in *Current Therapy*. 24:131, Philadelphia, WB Saunders Co, 1972.
2. Goodman LS and Gilman A: *The Pharmacologic Basis of Therapeutics*. 4th ed, pp 1225-1229, New York, Macmillan Co, 1971.
3. Bernstein SH and Houser HB: Sensitivity reactions to an intramuscular injection of benzathine penicillin. *N Engl J Med* 260:747-751, 1959.
4. Rudolph AH and Price EV: Penicillin reactions among patients in venereal disease clinics. *JAMA* 223:499-501, 1973.
5. Von Arsdell PP Jr: The risk of penicillin reactions. *Ann Intern Med* 69:1071-1072, 1968.
6. Smith JW, Johnson JE and Cluff LE: Studies on the epidemiology of adverse drug reactions. II. An evaluation of penicillin allergy. *N Engl J Med* 274:988-1002, 1966.
7. Idsoe O, et al. Nature and extent of penicillin side-reactions with particular reference to fatalities from anaphylactic shock. *Bull WHO* 38:159-188, 1968.
8. McFarland RB, Colvin VG and Seal JR: Mass prophylaxis of epidemic streptococcal infections with benzathine penicillin G. II. Experience at a Naval Training Center during winter of 1956-57. *N Engl J Med* 258:1277-1284, 1958.
9. Trautwein C and Edwards EA: Multiple Infections in Acute Respiratory Diseases. III. Natural Immunity to and Interdependence of Eleven Etiological Agents in Naval Recruits: An Analysis of Serological Data. NAVMEDRSCHU-4 Research Project MF12.524.009-4013BE6I, Bureau of Medicine and Surgery Report (RU 72.3), Apr 1972.
10. Edwards EA and Rosenbaum MJ: Surveillance Program 1964-70. NAVMEDRSCHU-4 Research Project MF 12.524.009-4013BE6I, Bureau of Medicine and Surgery Report (RU 71.8), May 1971.
11. Rosenbaum MJ, et al: Epidemiology of the common cold in military recruits with emphasis on infections by rhinovirus types 1A, 2, and two unclassified rhinoviruses. *Am J Epidemiol* 93:183-193, 1971.
12. Peckinpaugh RO and Miller CH: NAVMEDRSCHU-4 Annual Progress Report to The Commission on Acute Respiratory Disease, Armed Forces Epidemiological Board, p 8. Navy Department, Bureau of Medicine and Surgery, 1972.
13. Sullivan EJ and Rosenbaum MJ: Isolation and identification of adenoviruses on microplates. *Appl Microbiol* 22: 802-804, 1971.
14. Rosenbaum MJ, Sullivan EJ and DeBerry P: Use of HeLa cells for the laboratory diagnosis of rhinovirus infections. *Bacteriol Proc*, V264, 1970.
15. Rosenbaum MJ, DeBerry P, Sullivan EJ, et al: Characteristics of vaccine-induced and natural infection with adenovirus type 4 in naval recruits. *Am J Epidemiol* 88:45-54, 1968. ☛

MEDICAL STUDENT RECRUITING:

Past, Present and Future

By CAPT Matt Backer, MC, USNR*

In May 1971, at a Reserve Forces Policy Board Seminar conducted at the Pentagon, an Army Major General asked a young Air Force physician the following question: "Doctor, when the draft ends, how are the Armed Forces going to get physicians?" To this the young man from Arkansas replied, "Ginral, you ain't gonna' get any." Though the young man may have been given to hyperbole, it can hardly be gainsaid that physician procurement will provide a challenge.

THE PAST

It is germane to the present problem to consider past efforts at recruiting medical officers for the Navy, much of which has been exerted at the student level. Table I chronicles past efforts.

As far back as World War I there was an *Enlisted Medical Reserve Corps* which medical students could join, allowing for completion of their medical education, with the understanding that they would subsequently serve on active duty in the Navy as physicians. We are unable to find much else recorded about medical recruiting until 1940, at which time the *Ensign HV-P Program* was begun; it also offered immunity to conscription while in medical school, contingent upon subsequent active Naval service.

In early 1943 the *Medical V-12 Program* was begun, in which medical students were placed on active duty as Apprentice Seamen, V-12. Their tuition and fees were paid, as was a very small stipend; they wore a midshipman-type uniform, and upon graduation they

were commissioned as lieutenants (jg), Medical Corps, USNR. It is of interest that many medical students around the country did, in fact give up their commissions as Ensigns HV-P, and reverted to enlisted status in order to take advantage of the tuition subsidy. Some V-12 students served on active duty before the end of World War II, but others did not finish school by that time. Many of the latter were called to active duty during the Korean conflict, in repayment for the deferment and tuition received.

TABLE I

PAST OFFICIAL DOCTOR-PROCUREMENT EFFORTS

<i>Year of Origin</i>	<i>Program</i>
1918	Enlisted Naval Reserve Corps
1940	Ensign HV-P Program
1943-1946	Medical V-12 Program
1946	Ensign HP Program
1950	Doctor Draft began
1952	Ensign 1995 Program
1957	Commandant Representatives appointed
1958	Senior Medical Student Program
1959	Commandant Representatives Seminar began

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The opinions and assertions contained in the above article are those of the author, and are not to be construed as official views of the Bureau of Medicine and Surgery, the Navy Department, or the naval service at large.

As a highly productive and enthusiastic physician in the Naval Reserve, CAPT Backer's views and analysis of medical student recruiting should be of considerable interest to our readers.

In 1946 the *Ensign HP (Hospital Corps, Probationary) program* was launched, thereby offering a probationary reserve commission to students in good standing, in any Class A medical school. The program made it possible for ex-V-12 students, and people who had had World War II service, to continue reserve participation. No tuition or stipend was included, nor was any active duty for training during the medical school years involved. Participants without prior active duty were required to serve two years of subsequent service as an active-duty doctor.

It is important to note that legislation existed from 1950 until 1 July 1973, which permitted the *drafting of doctors* into the armed forces; during the years 1958-60 and 1968-69, however, there were no doctors drafted. More than 5,000 physicians have been drafted into Naval service since 1954, and it goes without saying that many, many more entered various Navy medical programs under the threat of being drafted. It is also evident that the Navy has acquired significant numbers of doctors via the draft in other years (See Table II).

In the early 1950s the Ensign HP program was redesignated the *Ensign-1995 program*, and summer duty was made available. After the Korean conflict, however, there was little interest in the program. In 1954 it became necessary for the Navy to take 1,080 men from the selective service pool. (See Table II)

TABLE II

DRAFTED PHYSICIANS ASSIGNED TO THE NAVY SINCE 1954

Year	Number	Year	Number
1954	- 1,080	1964	- 325
1955	- 200	1965	- 320
1956	- 680	1966	- 662
1961	- 105	1967	- 657
1963	- 250	1971	- 531

In 1957, RADM Bartholomew Hogan, MC, USN, then Surgeon General, conceived the idea of appointing reserve medical officers as *Navy Commandant's Representatives* at medical schools throughout the country. Their task was to improve the image of Navy medicine



RADM Bartholomew W. Hogan, MC, USN
Surgeon General, 1955-1961

at the local level, and to sell the Ensign Medical program. Admiral Hogan also secured for Navy medical officers a number of advantages which were to improve the Corps as a career. Among these were the professional pay differential, the assurance of 20-year retirement if requested, and constructive credit allowance for medical school and intern years to allow earlier promotion to the rank of lieutenant senior grade. It is also fair to say that under his aegis, residency programs in the Navy became strong; because a significant pay differential between service and civilian residencies did exist at that time, the service programs were always filled.

In 1958, CAPT D.J. O'Brien, MC, USNR, then Director, Reserve Division, BUMED, authored the *Senior Medical Student Program (SMSP)* as part of the Ensign program. His testimony and that of Admiral Hogan secured funding from the Congress for 200 such billets



CAPT Donald P. O'Brien, MC, USNR

annually. This program placed senior students on active duty with its attendant pay and perquisites, but did not pay tuition. The SMSP attracted 200 students a year to accept regular Navy commissions, along with three years of obligated service. About this same time the Ensign program was redesignated the *Ensign 1915 program*.

The SMSP has been an important source of regular Navy doctors, and statistics on the retention of SMSP participants have reflected superior staying power. This is because many of these men served their internship residency in the Navy, and often secured more desirable assignments as a result of their longer commitment.

In 1958 CAPT O'Brien also organized the first of several biennial seminars conducted for the Commandant's Representatives, where information essential to recruiting of medical students was passed. These meetings continued until 1967, when they were eliminated for budgetary reasons. An excellent seminar in 1964, sponsored by CAPT James A. Murphy, then Medical Reserve Program Officer at Great Lakes, included two days of lectures at Great Lakes and two days at the Mayo Clinic.

Beginning in 1964, the Vietnam expansion and the attrition of World War II medical officers brought the problem of recruiting into sharper focus. Table III chronicles the recruiting efforts that were made, from that point, up to the present time.

TABLE III	
CURRENT DOCTOR-PROCUREMENT EFFORTS	
Year	Programs
1965	- Organization of Ensigns Medical Ensign Companies Scholarships proposed
1967	- (Army & Air Force Scholarships)
1970	- Ensign 1965 Scholarship Program
1971	- Reserve Forces Policy Board Meeting
1972	- "HR-2" Ensign 1975 Scholarship Program Commandant's Representative (Com-Rep) Seminars resumed
1973	- Com-Reps redesignated Medical School Liaison Officers (MSLOs) MSLO Newsletter



RADM John S. Cowan, MC, USN

For many years, Com-Reps at medical schools were urged to utilize a low-key approach to student recruiting. In 1965, RADM John Cowan, MC, USN (then CAPT, now retired) at a Com-Rep seminar at Willow Grove, Pa., made an impassioned appeal for better organization of Navy ensigns at medical schools. Admiral Cowan had an unusually keen grasp of reserve affairs in general, and of recruiting in particular, having personally visited all five medical schools in Philadelphia prior to his presentation. He accurately pointed out that without organization the student had little reason to feel he belonged to the Navy, a truism we might well remember in regard to our HR-2 Scholarship students of today.

Following the Willow Grove Seminar, RADM R.B. Brown, MC, USN, then Surgeon General (and later VADM), who had attended the seminar, first authorized the organization of students into Medical Ensign



VADM Robert B. Brown, MC, USN
Surgeon General 1965-1969

Companies. This particular device proved invaluable in recruiting, particularly in the Ninth Naval District. With clear vision of what would be required to recruit students, Admiral Brown also worked tirelessly during his tenure to secure scholarship subsidies.

In 1967 the Army & Air Force offered medical scholarships, but the numbers were small and the incurred obligation, lengthy. The scholarships were widely touted however, and hurt Navy recruiting efforts at that time because the Navy had none.

Any discussion of medical student recruiting would be grossly incomplete should it fail to mention the signal accomplishments of CAPT Thomas J. Canty, MC, USN (now retired), who was Medical Reserve Program Officer in the Ninth Naval District, from 1965 to 1968. CAPT Canty was much better known to the regular Navy as the founder of the Orthopedic Rehabilitation Center at Oak Knoll, for performing over 7,000 amputations without a fatality, and for commanding Naval Hospital Camp Pendelton; he brought to his last assignment all the vigor of his earlier career, and the wisdom of his vast experience.

Through extensive visitation CAPT Canty got to know every medical school dean in the Ninth Naval District personally, and presented citations to those who cooperated with the Navy. He appointed "Assistant Com-Reps" from among the ensigns at each school, to assist with recruiting. He picked up the Ensign Company concept and established more than ten such companies in the Ninth Naval District. He authored a curriculum for training these companies. Many, many students who were members of such companies in the late 1960s are on active duty today, and it is safe to state that if one could tabulate the largest number of medical officers recruited by the efforts of any single individual, that honor would go to CAPT T.J. Canty,



CAPT Thomas J. Canty, MC, USN

who also organized an outstanding seminar at Great Lakes in 1966.

While the Medical Ensign Companies were to prove effective organizational and recruiting devices, they were difficult to maintain. It was almost impossible to force these units into the mold which was cast for other post-active-duty reserve companies, and it was difficult to secure people to run these companies on a strictly voluntary, nonpay basis. Constant turnover, drill schedules and reports, and fitness reports were problems, to mention but a few. At present, HR-2 Scholarship students are not permitted to join reserve companies, so, unfortunately the demise of this useful instrument (the Medical Ensign Company) seems imminent.

THE PRESENT

In 1970 the Ensign-1965 Scholarship program first became available. It was (and is) a tremendous program for the recipient: he is placed on full-time active duty plus scholarship, but the number of billets is small (100 for all four years), and the program is costly for the number of doctor years secured.

Also, in 1970, CAPT Wendell A. Johnson, MC, USN (now retired) became Director, Reserve Division, BUMED, and launched an extensive and revitalized recruiting program which continues and expands to this date. In 1971 he sent Navy representatives who accompanied him to the Reserve Forces Policy Board in the Pentagon; the Board strongly recommended the present scholarship program. His extensive visitation program to medical schools has greatly rejuvenated recruiting efforts, as have the two Seminars on Medical Student Recruiting, sponsored by BUMED in 1972. The BUMED Reserve Division (Code 36) now generates a newsletter for Navy representatives at medical schools, who are now designated Medical School Liaison Officers (MSLOs). In addition to those mentioned herein by name, many other people have worked diligently to recruit students. Their contribution is gratefully acknowledged, and their numbers too great to enumerate individually.

For all of the above, the most important recent development for the recruitment of medical students is the Armed Forces Health Professions Scholarship legislation of 1972, the *HR-2 Bill*, or Ensign 1975 Program. By this legislation the Navy was authorized to place 1,000 medical students on scholarship with a \$400.00 per month stipend, on the condition that they would spend one year on active duty as a doctor for each year of subsidy received, with a minimum pay back of two years. These students are also placed on active duty for six weeks per year, at a naval hospital or

research facility if possible. As generous a program as this is, it is surprising that almost one year was required to fill the billets authorized by the initial legislation. In any case, it certainly gives the MSLO something very worthwhile to sell. So much for history.

How does one recruit the medical student of today? Most of course are recruited by Naval officers on the faculty of medical schools. An effective recruiter must have certain attributes. First and foremost, he must do his faculty job well. If he cannot do this, he cannot secure the respect of the students, or the cooperation of his colleagues. He must also be informed, available, honest, concerned, and helpful. While no individual possesses all of these attributes in perfection, to the extent that he develops them, he will be able to recruit.

The Medical School Liaison Officer (MSLO) cannot be effective alone. He must effect liaison with his Dean, his registrar, and other faculty members. Area recruiting-station personnel and the newly designated Area District Medical Recruiter are people he must know. He should know his district program officer, and personnel in BUMED who can help him. He should know people in neighboring service hospitals and bases, to which students can be taken.

Proven recruiting devices include the following: sending a welcoming letter to incoming freshmen, inviting them to join the Navy programs; addressing the newcomers on registration day; addressing medical fraternities and premed clubs, projecting Navy movies; organizing the Navy people who are present and doing things with them as a group; getting the students to active duty; promoting esprit by downward loyalty. Field trips to naval hospitals are particularly rewarding and will be increasingly available under present recruiting funding priorities. There are of course many other devices which have been used successfully, depending to a large extent upon the dedication, leadership, and enthusiasm of the liaison officer.

THE FUTURE

What of the future? Some fundamental needs are projected in Table IV.

While the present 1975 program is a great recruiter, it will not begin to pay off for two or more years; even then, it may yield an insufficient number of doctors annually to meet attrition. Perhaps partial scholarships, or scholarships without stipend could also be considered for a shorter payback. Those of us who try to contact medical students are certain of one thing; there must be some organization of the Navy students at each school. This "unit" should also be the source of some indoctrination for Naval officers. We have much to

TABLE IV

FUTURE NEEDS

- More (& different) scholarships
- Organization of ensigns at the schools
- Support and pay for the MSLO
- Medical quotas for Recruiting Districts
- Challenging career opportunities

learn in this area from NROTC units; and the 1975 program is, in fact, a medical ROTC.

Until recently, Navy representatives at medical schools have received little support. They need secretarial help, autovon or FTS capabilities, and enough money to get their uniforms pressed or buy a student's breakfast on occasion.

Recruiting stations should be given quotas to fill in the recruiting of medical students. While some of us enjoy great cooperation, there is evidence that some recruiting stations do not even know that the Ensign-1975 program exists. If counted on their quotas, the 1975 Ensigns might also be processed more expeditiously for commissioning.

In any discussion of recruiting, the related problem of retention must be addressed. Most young officers today are still leaving the service after their obligated duty is completed. They do so primarily for money, but also for ego satisfaction which many feel is lacking in the service. Many concerned people feel that a pay increase is absolutely essential if the Armed Forces Medical Corps are to survive. The services are doing much to challenge the young physician. It is the responsibility of every senior officer to try to do more. The physician that enters military service right after training may not fully realize that civilian practice is not without its frustrations, particularly the longer working hours which are usually involved.

Finally, it goes without saying that every Navy doctor, every Navy person who believes in the present system of health care for the military must be a recruiter. There are still a "few good men" who like change of climate, the sea, a career which is different, or who possibly even regard a few years of military service as a reasonable price for American citizenship. Our job is to find these men, sell them a worthwhile program, and fortify their interest in a naval medical career. ☸

NATIONAL VOLUNTEER WEEK ♡

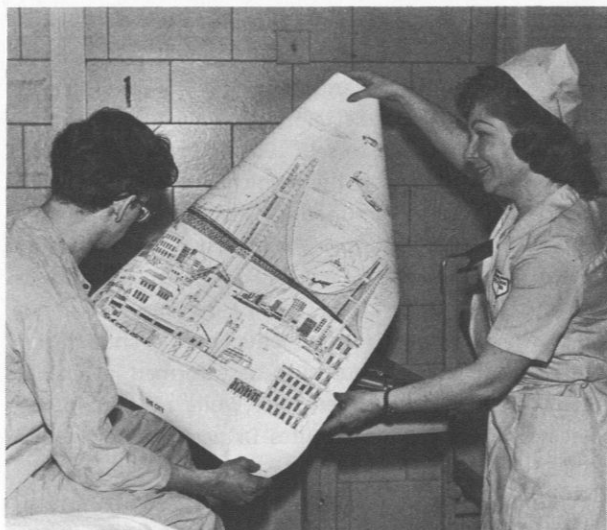
National Volunteer Week was observed throughout the Nation during April 21-27, 1974. This was the first time that a specific week had been singled out for the entire Nation to say "Thank you" to the men, women, and young people who give countless hours of generous volunteer service to others.

For the U.S. Navy Medical Department, this week provided a welcome opportunity to turn the spotlight on the dedicated, trained, and concerned individuals who volunteer their time and talents to serve in our medical facilities.



VOLUNTEER POWER.—JANGO volunteers check a patient's pulse and temperature at the National Naval Medical Center, Bethesda, Md.

Photographs of volunteers at the National Naval Medical Center, Bethesda, Md., were taken by HM2 Garry Silk and HM2 Earl MacDonald.



HELPING OUT.—Red Cross volunteer Jeanne Sonken brings a patient a poster to brighten his stay at the National Naval Medical Center, Bethesda, Md.

Who are these volunteers? Where do they come from? What do they do?

Well, those bright young faces that light up our wards and clinics belong to members of JANGO (Junior Army-Navy Guild Organization). They are 14 to 18 years old, the daughters of military personnel or direct Presidential appointees, and they have all completed 25 hours of training to be junior nurses' aides. The girls have a special affinity for the pediatric, medical, and surgical wards, where they provide valuable patient care. Under the supervision of the chief nurse of the ward, the girls record temperature, pulse, and respiration; give baths; make beds; feed and transport patients; and run errands. They continue their training by attending monthly meetings with the registered nurse who supervises the JANGO program.

Another important volunteer effort at naval medical facilities is the Navy Relief Program. Navy Relief is a private social service organization which provides assistance to Navy and Marine Corps dependents in times of emergency. Most of the volunteer participants are the wives of active duty or retired military personnel. These hard-working women offer social services to hospital staff members and inpatients in a wide range of areas. Many volunteer hours are spent knitting or crocheting baby layettes, known as "new baby sea bags," which are made available to new parents on the basis of need. New parents are also offered financial counseling on request. In many naval medical facilities, Navy Relief volunteers have set up free nurseries where mothers can leave their children while they keep a medical appointment.

Navy Relief volunteers work closely with the American Red Cross, an organization with its own long history of service in military hospitals. Although no statistics are available which document the total number of hours of service donated by Red Cross volunteers each year in naval facilities around the world, it is still possible to obtain some idea of the vast resource these volunteers represent. For example, during Fiscal Year 1973 Red Cross volunteers at five major Naval Hospitals (Bethesda, San Diego, Long Beach, Oakland, and Portsmouth, Va.) gave a total of 149,211 hours of service. The financial savings this service represents for our medical facilities is inestimable, as is the positive effect these volunteers have on patient morale.

Nearly fifty percent of Red Cross volunteers are drawn from the civilian community; the other half are wives and daughters of military personnel. Red Cross volunteers help run recreation programs for patients, visit the wards with library and craft carts, arrange for birthday parties and holiday celebrations, plan Bingo and card games, sponsor folk-singing programs, and provide other entertainment. Volunteers also offer patients personal services, such as shopping and writing letters. Under the supervision of professional case workers, some Red Cross volunteers provide a social case work service to inpatients.

Volunteers work in naval medical facilities for the sheer satisfaction of providing service to others. But it's a rare volunteer who wants to be totally anonymous. Most appreciate some recognition of their efforts. During National Volunteer Week the Navy Medical Department made special efforts to honor volunteers as People of the Hour.

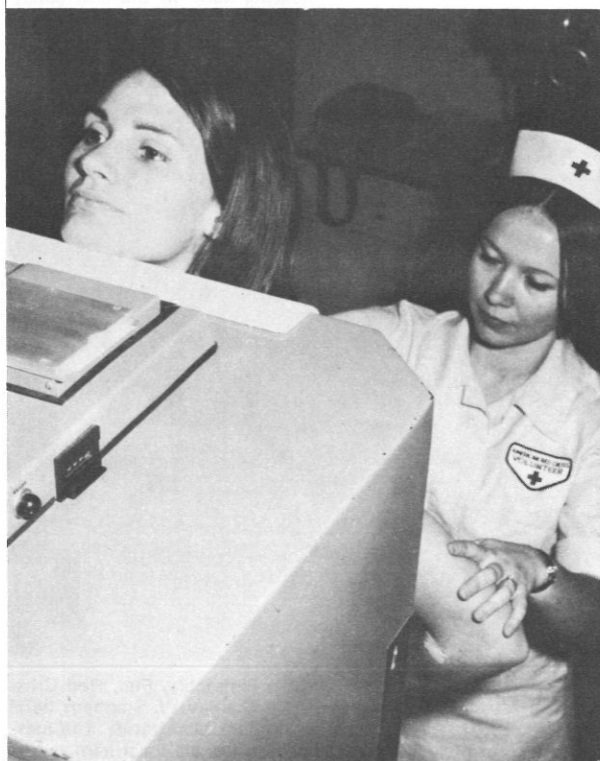
What would we do without them?



NAVY RELIEF.—Mrs. Charlotte Gregg, a volunteer with the Navy Relief Society at the National Naval Medical Center, Bethesda, Md., listens as a Navy man describes his need for help. The Navy Relief Society provides military dependents with emergency financial help and other social services.



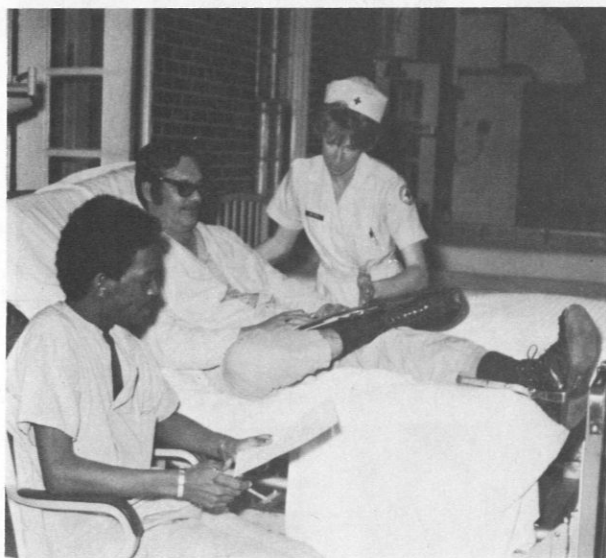
A TOUCH OF BLARNEY.—Red Cross volunteers at NAV-REGMEDCEN San Diego, Calif., help a patient celebrate St. Patrick's Day with his very own Blarney Stone. At the left is Ragean Kerns; on the right is Linda Sackson.



RED CROSS VOLUNTEER.—Mrs. C. Richter (right) positions PN3 Kathy M. Walker for a chest X-ray. Mrs. Richter is a Red Cross volunteer who works under professional supervision at Nav Hosp Pensacola, Fla.



HELPING HAND.—Lillian Baines, R.N., a Red Cross volunteer, offers PO1 Richard Grosse a helping hand in the emergency room of Nav Hosp Pensacola, Fla. Miss Baines is a retired Navy nurse.



WRITING HOME.—At Nav Hosp Pensacola, Fla., Red Cross volunteer Mrs. S.E. Pepek helps PN2 Stanley W. Stephens (left) and MM1 Edwin Watson (center) prepare Marsgrams. The messages are transmitted to the men's families via local ham radio operators.



FINE ART.—SN Lewis Nichols, an orthopedic patient at Nav Hosp Pensacola, Fla., is instructed in art techniques by Red Cross volunteer Mrs. E. Talbot. Mrs. Talbot is an experienced artist and teacher.



IN THE CLINIC.—Mrs. J.C. Quititquit (right), Red Cross volunteer at Nav Hosp Pensacola, Fla., capably augments the staff of the ENT Clinic. Here she assists HM3 Bud McLean in completing an audiometric evaluation of Sharroll Bedgood (left).



A FUTURE JANGO?—Terry Jacoby (left), daughter of RADM William Jacoby, MC, USN (Chairman of the Internal Medicine Service at NNMC, Bethesda), and Anne Henderson (right) are already convincing a third potential candidate that JANGOs are very special people. (These winsome young ladies graced the front cover of our April issue.)



JANGOS AT WORK.—Volunteer JANGOs assist a patient at the National Naval Medical Center, Bethesda, Md. 🇺🇸





VADM J.L. HOLLOWAY, III NOMINATED FOR CNO

VADM James L. Holloway, III, USN, who commanded the first nuclear-powered ship to engage in combat, has been nominated for the office of Chief of Naval Operations (CNO). He will succeed VADM Elmo R. Zumwalt, USN, who retires 29 Jun.



VADM James L. Holloway, III, Vice Chief of Naval Operations, Navy Department, has been nominated for the office of Chief of Naval Operations.

A graduate of the US Naval Academy Class of 1943, ADM Holloway served on destroyers in both the Atlantic and Pacific theatres during WWII. As a gunnery officer in the USS *Bennion*, he participated in the Leyte landings and in the capture and occupation of Saipan, the Southern Palau Islands, and Tinian. During the Leyte campaign he took part in the Battle of Suriago Straits, the largest naval surface action in history.

Upon completing flight training after the war, ADM Holloway flew Curtiss Helldivers from the carrier USS *Kearsarge*. He later served in Korea as Operations Officer of Air Task Group ONE, flying jet fighters from the USS *Valley Forge*, and as Executive Officer of Fighter Squadron FIFTY-TWO in the USS *Boxer*.

In 1958 ADM Holloway assumed command of Attack Squadron EIGHTY-THREE, an A-4 Skyhawk squadron deployed aboard the USS *Essex* with the Sixth Fleet, and participated in the Lebanon landings. His squadron later became part of the Seventh Fleet during the Quemoy-Matsu crisis in Oct 1958.

After serving as Administrative Aide to the Deputy Chief of Naval Operations for Air, and as CO of the USS *Salisbury Sound*, ADM Holloway was selected to train under VADM Hyman G. Rickover, USN (Ret.), in the Naval Reactors Division of the Atomic Energy Division. He assumed command of the USS *Enterprise*, the Navy's only nuclear-powered carrier in Jul 1965, and five months later saw action in the South China Sea. This was the first time that a nuclear-powered ship had engaged in combat. ADM Holloway served two full combat tours in *Enterprise*, during which time the ship

was awarded the Navy Unit Commendation and won the coveted "E" for standing first in battle efficiency among attack carriers in the Pacific Fleet. At 44 years of age, ADM Holloway was among the youngest naval officers in modern times to be selected for promotion to RADM in May 1966.

In 1967 ADM Holloway returned to Washington to the Office of the Deputy Chief of Naval Operations for Plans and Policy. He served on the Panel to Review Safety in Carrier Operations, and conducted a special study on the costs of new ship construction. He then established the Nuclear Attack Carrier Program as Program Coordinator; he also served as Director of the Strike Warfare Division in the Office of the CNO.

ADM Holloway became Commander of Carrier Division SIX in 1970. Later that year, while embarked in the aircraft carrier USS *Saratoga*, he directed operations in the eastern Mediterranean during the Jordanian crisis. ADM Holloway subsequently served as Deputy Commander in Chief Atlantic and U.S. Atlantic Fleet. Promoted to the rank of VADM in Feb 1971, he assumed command of the Seventh Fleet in May 1972. He was designated Vice Chief of Naval Operations in May 1973, in which position he was serving at the time of his recent nomination.

ADM Holloway's decorations include three awards of the Distinguished Service Medal, two awards of the Legion of Merit, the Distinguished Flying Cross, the Bronze Star Medal with Combat "V," the Air Medal with two Gold Stars, the Navy Commendation Medal with Gold Star and Combat "V," the National Order of Vietnam Fifth Class, and the Republic of Vietnam Gallantry Cross with Palm. He also holds many campaign and service medals.

NORFOLK NAV REG DENTAL CENTER CONTINUING EDUCATION PROGRAMS

Naval Regional Dental Center, Norfolk, Va., recently received approval of the Academy of General Dentistry for continuing education programs. The continuing education programs are acceptable for fellowship and membership-maintenance credit. Programs conducted to date include a one-hour weekly officers' conference, periodic three-hour evening seminars in the dental specialties moderated by Board-qualified/certified staff personnel, and quarterly tri-service dinner meetings with Army and Air Force dental officers. In addition, casualty care and officer indoctrination courses are conducted by the Dental Center several times each year. — BUMED, Code 6.

NEW ASSIGNMENT POLICY FOR HC SCHOOL GRADUATES

Hospital corpsmen graduating from Class A basic Hospital Corps schools may now be assigned to any billet requiring their rate, including billets with the operating forces or the Fleet Marine Force. This change in policy is necessitated by the rapid turnover in personnel in the lower pay grades, and is designed to offer Hospital Corps personnel a stable first-duty assignment after completion of initial training. — BUMED, Code 34.

ACDUTRA OPPORTUNITIES FOR NAVAL RESERVISTS

There will be an unusually large number of active duty for training (ACDUTRA) opportunities available to Naval Reservists during the coming summer months.

Any Medical Department Reservist who would like a meaningful tour of ACDUTRA can find it in the following list of billets. All opportunities will be available during the period 23 Jun through 20 Jul, and all are designated for naval hospitals or regional medical centers unless otherwise indicated. Interested, eligible Reservists should make applications for ACDUTRA using the appropriate chain of command.

Billets marked with an asterisk (*) are those in which the requirement for assistance is critical. — BUMED, Code 36A.

ANESTHESIOLOGY

- *Patuxent River, Md.
- Whidbey Island, Wash.
- *NRMC, Portsmouth, Va. (6/15 thru 7/31)

DERMATOLOGY

- *NRMC, Portsmouth, Va. (6/15 thru 7/31)
- Annapolis, Md.
- Corpus Christi, Tex.
- Great Lakes, Ill.

ENT

- *NRMC, Portsmouth, Va. (6/15 thru 7/31)

FLIGHT SURGERY

- *NRMC, Jacksonville, Fla. (6/1 thru 7/31)
- *NRMC, Portsmouth, Va. (6/15 thru 8/30)

GENERAL MEDICAL OFFICERS (all billets available
7/1 thru 7/21)

- *NAVWEAPLAB, Dahlgren, Va.
- *NAVORDSTA, Indian Head, Md.
- *NAS, Brunswick, Maine
- *NAVSTA, Newport, R.I.
- *NAVACT, Brooklyn, N.Y.
- *NPTU, Schenectady, N.Y.
- *NAS, Lakehurst, N.J.
- *NTC, Bainbridge, Md.
- *NAVBASE, Norfolk, Va.
- *Boone Clinic, NAVPHIBASE, Norfolk, Va.
- *NAS, Oceana, Va. (Va. Beach, Va.)
- *NRMC, Beaufort, S.C.
- *NAS, Glynco, Ga.
- *NAS, Atlanta, Ga.
- *NAVSTA, Mayport, Fla. (Jacksonville)
- *NAS, Memphis, Tenn.
- *CTC, Pensacola, Fla.
- *NAS, Meridian, Miss.
- *CBCENTER, Gulfport, Miss.
- *NAS, Kingsville, Tex.
- *NAS, Dallas, Tex.
- *NTC, Great Lakes, Ill.
- *NAF, Detroit, Mich.
- *NAS, Miramar (San Diego), Calif.
- *MCRD, San Diego, Calif.
- *NAVSTA, San Diego, Calif.
- *NTC, San Diego, Calif.
- *MCB, 29 Palms, Calif.
- *MCAS, Yuma, Ariz.
- *MCSC, Barstow, Calif.
- *NAS, Alameda (Oakland), Calif.
- *NAVDISP, Seattle, Wash.
- *NAU, Idaho Falls, Idaho
- *NAVSTA, Adak, Alaska (available to reservists re-
siding west of the Mississippi)

GENERAL SURGERY

- *Portsmouth, N.H. (6/15 thru 7/15)
Charleston, S.C.
- *Whidbey Island, Wash.
- *NRMC, Portsmouth, Va. (6/15 thru 7/31)
- *Memphis, Tenn. (5/1 thru 7/31)

INTERNAL MEDICINE

- *Annapolis, Md. (two per two-week period, 6/15
thru 8/15)
- *Cherry Point, N.C.
- *NRMC, Portsmouth, Va. (6/1 thru 7/31)
- *Patuxent River, Md. (6/1 thru 7/31)
- *MCAS, El Toro, Calif. (6/24 thru 7/30)

NEUROLOGY

- Camp Lejeune, N.C. (Clinical)
- Camp Pendleton, Calif.
- Great Lakes, Ill.
- Long Beach, Calif.

OB-GYN

- *Annapolis, Md. (6/15 thru 8/15)
- *Patuxent River, Md. (7/15 thru 7/26)
- *NRMC, Portsmouth, Va. (6/15 thru 7/31)

OPHTHALMOLOGY

- *Jacksonville, Fla. (6/1 thru 8/30)
- *NRMC, Portsmouth, Va. (6/15 thru 7/31)

ORTHOPEDICS

- *Patuxent River, Md. (6/1 thru 7/31)

PATHOLOGY

- *Jacksonville, Fla.
- *Memphis, Tenn.
- *Newport, R.I.
- *NRMC, Portsmouth, Va. (6/15 thru 7/31)

PSYCHIATRY

- Camp Lejeune, N.C.
- NRMC, Portsmouth, Va. (6/15 thru 7/31)
- Jacksonville, Fla.
- Bremerton, Wash.
- Charleston, S.C.
- Key West, Fla.
- Memphis, Tenn.
- Newport, R.I.

PEDIATRICS

- *NRMC, Portsmouth, Va. (6/15 thru 7/31)
Bremerton, Wash.
- *Lemoore, Calif.
Orlando, Fla.
- *Port Hueneme, Calif.
- *Quantico, Va.
- *Patuxent River, Md. (6/1 thru 7/31)
MCAS, El Toro, Calif. (6/24 thru 7/30)

PLASTIC SURGERY

- Philadelphia, Pa.

RADIOLOGY

- *Bremerton, Wash.
- *Lemoore, Calif.
- *Patuxent River, Md.
- *Whidbey Island, Wash.
- *New London, Conn.
- NRMC, Portsmouth, Va. (6/15 thru 7/31)

UROLOGY

- *Pensacola, Fla.
- Charleston, S.C.
- *Jacksonville, Fla. (6/1 thru 8/30)

ANESTHESIOLOGY

- *NH, Roosevelt Roads, P.R.

GENERAL SURGERY

- *NAVTRACOM, Kenitra, Morocco (6/16 thru 6/29)
- *NH, Guantanamo Bay, Cuba (6/12 thru 7/20)
- *NH, Roosevelt Roads, P.R.

INTERNAL MEDICINE

- *NH, Guantanamo Bay, Cuba (6/12 thru 7/20)

PEDIATRICS

- *NH, Guantanamo Bay, Cuba (6/12 thru 7/20)

ORTHOPEDIC SURGERY

- *NH, Guantanamo Bay, Cuba (6/12 thru 7/20)

RADIOLOGY

- *NH, Guantanamo Bay, Cuba

ACDUTRA opportunities for Medical Service Corps officers are as follows:

- NRMC, Memphis, Tenn. . . . *Optometrists
(Continuing requirement)
- NNMC, Bethesda, Md. . . . *Pharmacist
(5/20 thru 6/3)

There will be a continuing requirement at all hospitals for corpsmen in the five technical areas listed below. The number of opportunities will vary with the activity

concerned. Inquiries regarding ACDUTRA should be directed to the command at which the individual Reservist desires duty. The requirement at Quantico is for the support of the summer Platoon Leader Course.

All hospitals: Operating room technicians
Laboratory technicians
X-ray technicians
Pharmacy technicians
Neuropsychiatric technicians.

MCEDC, Quantico, Va: . All technic specialties and general service (Require 20 hospital corpsmen each two-week period, 7/1 thru 8/31).

BILLETS AVAILABLE FOR SECOND-TOUR FLIGHT SURGEONS

In accordance with Bureau of Naval Personnel policy, the projected rotation date (PRD) has taken on increased importance. Present policy prohibits the transfer of any officer prior to his PRD. The initial operational tour for most flight surgeons is two years unless they are in a billet with specific tour requirements, e.g., Hawaii, Adak, Naples, First Marine Air Wing. Any flight surgeon approaching his PRD may request a permanent change of duty if he agrees to remain at his new duty station for a minimum of one year in the continental United States, or for the BUPERS-required tour at overseas bases. The majority of flight surgeons in receipt of release from active duty orders are eligible for transfer to a duty station of their choice if they desire to extend.

The following list of billets are available to any second-tour flight surgeon, dependent on prior commitment; in other words, first come first served. All interested flight surgeons may contact CAPT H.S. Trostle, MC, USN, (Code 51, BUMED), or call Autovon 294-4183 for additional information.

FLIGHT SURGEON BILLETS AVAILABLE:

NAS, AGANA, GUAM
Assistant SMO
VQ-3

NAS, ALAMEDA, CALIF.
Assistant SMO
NARU
VAQ-130

ANTARCTIC SUPPORT ACTIVITY

NAS, ATLANTA, GA.

BARBERS POINT, HAWAII

Assistant SMO

VP Squadron

MCAS, BEAUFORT, S.C.

Marine Air Group

NAS, BRUNSWICK, MAINE

Assistant SMO

VP Squadron

NAS, CECIL FIELD, FLA.

VA-45

Attack Carrier Air Wing

Light Attack Wing One

NAS, CHASE FIELD, FLA.

MCAS, CHERRY POINT, N.C.

Hospital Flight Surgeon

Second Marine Air Wing

NAF, CHINA LAKE, CALIF.

NAS, CORPUS CHRISTI, TEX.

NAS, CUBI POINT, REPUBLIC OF PHILIPPINES

NAS, DALLAS, TEX.

NAF, DETROIT, MICH.

NATIONAL PARACHUTE FACILITY, EL CENTRO, CALIF.

MCAS, EL TORO, CALIF.

Assistant SMO

Third Marine Air Wing

NAS, FALLON, NEV.

NAS, GLENVIEW, ILL.

NAS, GUANTANAMO BAY, CUBA

NAS, JACKSONVILLE, FLA.

Assistant SMO

VP Squadron

HS Wing One

NAVAIRDEVCON, WARMINSTER, PA.

MCAS, KANEOHE, HAWAII

First Marine Brigade

PACIFIC MISSILE RANGE, KAUAI, HAWAII

NAS, KEY WEST, FLA.

Assistant SMO

VF-101

NAS, LAKEHURST, N.J.

Assistant SMO

NARU

LEMOORE, CALIF.

Attack Carrier Air Wing

NAS, MEMPHIS, TENN.

Assistant SMO

NAS, MERIDIAN, MISS.

TRAWING ONE

NAS, MIRAMAR, CALIF.

Attack Carrier Air Wing

NAS, MOFFETT FIELD, CALIF.

Assistant SMO

VP Squadron

NAVAL POSTGRADUATE SCHOOL, MONTEREY, CALIF.

NAPLES, ITALY

COMFAIRMED

VR-24

NAS, NEW ORLEANS, LA.

NAVSTA, NEWPORT, R.I.

MCAS, NEW RIVER (Jacksonville), N.C.

SMO

MAG-26, 29 — Helicopter Squadrons

NAS, NORFOLK, VA.

Assistant SMO

Naval Safety Center

CAEWW-12

VR-1

HM-12

NAS, OCEANA, VA.

Attack Carrier Air Wing

PATUXENT RIVER, MD.

Naval Hospital
Naval Air Test Center
VQ-4
VP-30
VX-1

PENSACOLA, FLA.

NAMI

NAS, POINT MUGU, CALIF.

Assistant SMO
NARU

MCAS, QUANTICO, VA.

Assistant SMO

ROOSEVELT ROADS, P.R.

Naval Hospital

NAS, NORTH ISLAND, CALIF.

Assistant SMO
NARU
CAEWW-11

NAS, SOUTH WEYMOUTH, MASS.

WHIDBEY ISLAND, WASH.

Assistant SMO
COMFAIRWHIDBEY

NAS, WHITING FIELD, FLA.

NAS, WILLOW GROVE, PA.

Assistant SMO

MCAS, YUMA, ARIZ. ☛

**CALL FOR PAPERS: JOINT COMMITTEE ON
AVIATION PATHOLOGY**

The Ninth Biennial Scientific Session of the Defense and Civil Institute of Environmental Medicine will be held 17-19 Sep 1974 in Toronto, Ontario, Canada. Papers are invited on the following subjects: cardiovascular pathology, methodology in aircraft accident investigations, alcohol and nonmedical drugs in aviation, fatigue and human reliability-postaccident analysis, computer applications in accident analysis, and air-traffic control as a human factor in aircraft accidents.

Abstracts of proposed papers should be submitted by 1 Jun 1974 to appropriate national representatives, or one of the following officials:

COL I.A. Marriott, MC, CF
Program Chairman
Director of Preventive Medicine
National Defense Headquarters
Ottawa, Ontario, Canada K1A-OK2

MAJ Robert R. McMeekin, MC, USA
Secretary, Joint Committee on Aviation Pathology
Chief Aerospace Branch
Armed Forces Institute of Pathology
Room M-127
Washington, D.C. 20306. ☛

**PROFESSIONAL EDUCATION AVAILABLE
THROUGH NAVY-SPONSORED PROGRAMS**

Navy Medical Department personnel can take advantage of many Navy-sponsored opportunities for professional education. Boards meet throughout the year to pick candidates for special programs. General eligibility criteria for the various programs and approximate convening dates of the selecting boards are given below. For more information, contact your local education and training officer, or write the training representative for your Corps.

Navy Enlisted Nurse Education Program (NENEP) — Offers E-4s and above, in Hospital Corps and dental technician ratings, the opportunity to pursue nursing education leading to a baccalaureate degree and commission as Nurse Corps ensigns. Students selected for this program receive pay and allowances of their rate, as well as tuition, fees, and textbooks. Both men and women may apply. Applications are due in the Navy Recruiting Command each year by 1 Jan. Board meets in February or March.

Navy Enlisted Dietetics Education Program (NEDEP) — Offers enlisted men and women two- or three-year college educations leading to a bachelor's degree in medical dietetics, and to commission as an ensign in the Medical Service Corps. Students in this program receive the pay and allowances of their rate, as well as payment of tuition, fees, and textbooks. Upon completion of their academic programs, students are commissioned in the Medical Service Corps and are obligated to serve four years' active duty. Applications are due each year by 1 Jan. Board meets in late January.

Medical Service Corps (MSC) Student Program — This established program was developed to provide

essential input for the specialties of dietetics, physical therapy, occupational therapy, and health care administration. It is an early commissioning program whereby students are commissioned as ensigns, and receive pay and allowances for that grade during their final year of a baccalaureate program or final two years of a graduate program. Students are obligated to serve three years' active duty upon completion of their academic program.

Dental Scholarship Program — Open to all active-duty Navy and Marine Corps officers, enlisted personnel, and inactive-duty Reservists who have been accepted or are enrolled in dental schools approved by the American Dental Association. In addition to full tuition, fees, instruments, and supplies, candidates selected for this program will receive the pay and allowances of a naval officer. Students are appointed ensigns in the Naval Reserve and are on active duty during training. Twenty-four months later they are promoted to lieutenant, junior grade, and upon graduation from dental school are promoted to lieutenant. Applications are due on 1 Apr. Board meets in May.

Medical/Osteopathic Scholarship Program — Open to all active-duty Navy and Marine Corps officers and enlisted personnel who are enrolled in or have been accepted by approved medical or osteopathic schools. The Navy pays full tuition and \$200 a year for books. Students get officer pay depending on their rank. Program participants are first appointed as ensigns. Twenty-four months later they are promoted to the rank of lieutenant junior grade, and upon graduation from medical or osteopathic school they are promoted to the rank of lieutenant. Applications are due 15 Apr. Board meets in April.

Armed Forces Health Professional Scholarship Program — Applicants must be U.S. citizens, eligible for Reserve commissions, who are enrolled in or accepted by approved medical, osteopathic, or dental schools. In addition, the Navy sponsors optometry students for the final two years of their academic program, and clinical psychology students at the Ph.D. level. Selectees receive \$400 a month in addition to tuition, books, laboratory expenses and fees; they are eligible for commission as Reserve ensigns. Each graduate must serve on active duty one year for each year of schooling received. Minimum obligation is two years. Applications are due 1 May for the medical program and 15 Mar for the dental program.

Physician's Assistant Warrant Officer Program — Open to male and female hospital corpsmen in the grades of E-5 and above. Selectees receive one year of didactic training at the Air Force School of Health Care Sciences, Sheppard AFB, Tex. This training is followed by one

year of clinical apprenticeship at a naval hospital. Those who qualify are appointed warrant officers on completion of the two-year program. Applications are due 1 Mar. Board meets in March.

MEDICAL SERVICE CORPS INSERVICE EDUCATION PROGRAMS

Naval Postgraduate School — Medical Service Corps officers are eligible for the Navy management curriculum and are awarded a master of science degree upon successful completion. Students major in either personnel management or financial management. Approximately five Medical Service Corps officers attend each year.

Naval School of Health Care Administration — Provides education in the management aspects of health-care facilities. The program is designed primarily for health care administration officers selected through the Inservice Procurement Program. Academic credits are granted by The George Washington University, Washington, D.C., and successful completion of the program satisfies both major and minor requirements for a bachelor of science degree in health care administration. Officers with sufficient prior college work are awarded a degree upon graduation. Thirty-nine officers attend the program each year.

Amphibious Warfare School — One health care administration officer attends this program each year, and upon completion is assigned duties with Marine Corps units and staffs.

Command and Staff Course — One health care administration officer attends this course each year. Upon completion, the officer is assigned to an appropriate Marine Corps billet.

Armed Forces Staff College — This school represents the primary vehicle for assignments to fleet support-staffs and other positions of responsibility. One health care administration officer attends each year.

NURSE CORPS INSERVICE EDUCATION PROGRAMS

Full-Time Undergraduate, Graduate, and Doctoral Instruction — Full-time instruction at civilian colleges and universities in nursing service administration, nursing education, nursing research, supervision, clinical specialties, and nurse practitioner programs is offered to qualified Nurse Corps officers of the regular Navy.

Naval Postgraduate School — Offers Navy nurses a course in Navy management leading to a master of science degree.

Anesthesia Program — This two-year, Navy-sponsored anesthesia program was established to meet the demand for, and replenish the supply of registered-nurse

anesthetists in the Navy. This program is accredited by the American Association of Nurse Anesthetists (AANA), and consists of one year of didactic study at The George Washington University, Washington, D.C., and one year of clinical training at selected naval hospitals. Upon successful completion of the program, applicants are eligible to take the certification examination of the AANA. This program is available to regular or Reserve Nurse Corps officers on active duty.

Ob/Gyn Nurse Clinician Program — This eight-month course at a naval hospital prepares nurses in obstetrics and gynecology, to function in an expanded role as a member of the Navy health-care team. The course is available to regular and Reserve Navy nurses who have the necessary basic educational preparation, and are willing to obligate themselves for an additional year of service upon completion of training.

Pediatric Nurse Practitioner Program — Full-time instruction in civilian universities is being offered Navy nurses to prepare them to function as pediatric nurse practitioners. Courses of four- to eight-months' duration, leading to certification, are offered to regular and Reserve officers; civilian training in master's degree programs is offered to nurses of the regular Navy.

In addition to the programs described above, the various corps of the Navy Medical Department offer a wide variety of continuing and advanced education programs. Medical Department personnel are encouraged to investigate these opportunities for professional growth. 🍀

FLIGHT SURGEON CURRICULUM FOR FAMILY PRACTICE RESIDENCY AMA-APPROVED

The American Medical Association's Residency Review Committee for Family Practice approved in January the inclusion of the Navy's flight surgeon curriculum as an elective for the last four months of the Family Practice Residency Program at Nav Hosp Pensacola, Fla. The Committee represents the Academy of Family Physicians, the American Board of Family Practice, and the Council on Medical Education.

To attend classes, residents enrolling in the flight surgeon curriculum need only walk across a parking lot, from the Family Practice Clinic to the Naval Aerospace Medical Institute. Both are components of the Naval Aerospace and Regional Medical Center at Pensacola.

The Institute's syllabus is designed to train selected medical officers in the specialty of aerospace medicine, qualifying them for the designation of Naval flight surgeon upon their completion of subsequent flight indoctrination. The flight surgeon student's instruction,

which includes survival and flight training, takes six months to complete; however, family practice residents will be given professional credit only for the four months of academic courses.

The 413 academic hours include 44 in ophthalmology, plus 24 in the Ophthalmology Clinic; 42 in cardiology; 36 in neuropsychiatry, plus 24 in the Neuropsychiatry Clinic; 34 in life-support sciences (LSS), plus 30 in the LSS laboratory; 22 in otorhinolaryngology, plus 12 in the Otorhinolaryngology Clinic; and smaller numbers of hours in such areas as aircraft accident investigation, aviation dentistry, aviation pathology, aviation physical examination clinic, aviation safety and crash investigation, dermatology, medical aspects of nuclear biological-chemical-warfare defense, operational field trips, operational medicine, operational medicine clinic, psychology, research orientation, shipboard orientation cruise, special board of flight surgeons, special guest lectures, and surgery.

Pensacola's Family Practice Residency Program is under the direction of LCDR Timothy F. Harrington, MC, USNR. When asked if he were pleased with the AMA approval, Dr. Harrington said, "We are very pleased. This is one of the things we have been working for."

CAPT Robert C. McDonough, MC, USN, commanding officer of the Naval Aerospace Medical Institute, also expressed pleasure on learning of the approval. "This will give us another source of candidates for flight surgeon training," he said. "Hopefully the family practice specialists at hospitals at the larger air stations will be able to handle some of the flight surgeon workload. We are very pleased with the AMA approval."

Nav Hosp Pensacola began family practice residency training in Jul 1972 with the opening of the Family Practice Clinic. There are now ten residents in training. LT P. Soballe, MC, USN, the first resident to enter the third year, has assumed the duties of chief resident.

Quality of care is emphasized in the residency program. A daily chart audit is conducted, not only to examine the performance of the residents but also the performance of the staff, as all charts are reviewed without discrimination. These daily sessions are excellent teaching devices because they are patient oriented and problem oriented. The overall objective of all teaching is to develop competent physicians who are patient-oriented problem solvers, confident in their abilities and aware of their limitations.

The patient load of the Family Practice Clinic is derived from the large retired population around Pensacola, as well as from active-duty personnel and their dependents. Services available include all of those normally provided by a family physician, including medicine, pediatrics, obstetrics, gynecology, surgery,

psychiatry, and preventive medicine. Residents are encouraged to obtain as much information about each family as possible, to better understand the dynamics of the family in health and in illness.

The Clinic provides private offices for the five staff physicians, and has eight adjacent fully equipped examination rooms, creating four suites of offices. The team members share the examination rooms. With this physical layout, the resident's resource personnel are situated only a few steps away for purposes of consultation.

The facility also has a large intake area, outside the main-traffic pattern, where vital signs can be obtained. There are facilities for minor surgery, sigmoidoscopy, casting, and ENT examinations. There is also a small laboratory area where urinalysis, cultures, and other simple tests can be conducted without sending the patient to the main hospital.

Other staff members include three licensed practical nurses and one hospital corpsman, all of whom function under the direction of the head nurse, Mrs. E. Westling, R.N. The clinic staff is further augmented by Red Cross volunteers, one file clerk, and one stenographer.

The Clinic is designed to operate as a free-standing unit, in much the same manner as a private physician engaged in group practice might operate. Patients have their own physician who cares for them and the other members of their families. This is a new concept in military medicine, and one that has been very well received by the patients. The Clinic staff attempts to personalize care as much as possible, reducing waiting time and other problems to a minimum. Patients are



FAMILY PRACTICE.—LCDR Timothy F. Harrington, MC, USNR, director of the Family Practice Residency Program at Nav Hosp Pensacola, Fla., stops in the waiting area to discuss a patient's record with Mrs. Elaine Westling, R.N.

seen by appointment in most instances, although the schedule permits openings for urgent cases.

The proximity of the Naval Aerospace Medical Institute further enhances the program, offering the unique capability of testing patients with some of the most sophisticated and intricate equipment available to medical science. Readily available, well-trained specialists on staff at the Institute complement a fine staff of in-hospital consultants. Consulting civilian medical specialists from the Pensacola Educational Program round out the complex.

The residency program can also make use of an automated history and physical examination capability conducted by specially trained paramedical personnel. This capability, under the direction of LCDR A. Kaplan, MC, USNR, helps to establish a uniform data base for new families as part of the routine intake procedure.

Night call for residents is designed to orient them to management problems which hospitalized patients present, and to familiarize residents with initial workup and management of patients who are admitted to the hospital on an emergency basis. Residents work from the Emergency Medical Service area during their watch, seeing emergencies as they arrive.

Family practice represents a departure from the traditional fragmentary care rendered at many military facilities; personalized comprehensive care is stressed. With the trend toward conversion of many outpatient facilities to the family-practice format, it is hoped that increasing numbers of physicians will find this medical specialty professionally rewarding and personally satisfying. Patients and physicians have long yearned, equally, for the ideal medical situation in which they are allowed to interact with one another, in an attitude of mutual trust and respect. This may well be it — that long awaited concept come true. ☘



DISTINGUISHED VISITOR.—VADM Donald L. Custis, MC, USN (left), the Navy Surgeon General, visited Nav Hosp Pensacola in Sep 1973 to celebrate the first anniversary of the Family Practice Residency Program. He was briefed on the program's progress by CDR (now CAPT) George C. Bingham, MC, USN (center), chairman of the Family Medicine Department, and; LCDR Timothy F. Harrington, MC, USNR (right), director of the residency program.

FORMER OCEANOGRAPHER NOW MD AT NAVREGMEDCEN SAN DIEGO

LT Ned W. Garrigues, MC, USN, the first graduate to complete all four years of medical school under the Navy Medical Scholarship Program, is now a member of the staff at Naval Regional Medical Center San Diego, Calif.

Dr. Garrigues became interested in medicine while he was a midshipman at the Naval Academy, and took several premed courses as part of his undergraduate training. He graduated from the Academy in 1968 with a B.S. degree in oceanography, and subsequently served two years as a line officer on a destroyer in the western Pacific. While serving in the fleet, he decided to apply for medical school and was accepted.

During the same year that Dr. Garrigues entered medical school, the Navy expanded its Medical Scholarship Program to include freshmen medical students. Dr. Garrigues was accepted into the program and attended the University of Kansas Medical School with full pay and allowances, as well as tuition and a stipend for books.

At the end of his first year in medical school, Dr. Garrigues came to NAVREGMEDCEN San Diego for a clinical clerkship in the Anesthesiology and Pathology Departments. Two years later, after completing his junior year, he attended the University of Western Australia in Perth where he trained in orthopedic surgery. He also spent two months with the Royal Flying

Doctor Service, which provides medical care to sparsely populated western Australia.

Dr. Garrigues plans to begin a surgical internship in July, and hopes to be accepted for residency in a surgical subspecialty. 🍀

DR. EILERS ADDRESSES NMTI GRADUATES

Seventeen medical laboratory technicians and five medical technologists graduated from the Naval Medical Training Institute (NMTI) on 15 Mar 1974. Guest speaker at the graduation was Dr. Russell J. Eilers, Special Consultant to the Vice-Chancellor for Health Affairs of the University of Kansas Medical Center, Kansas City.

Internationally known for his work in the field of standardization and quality control, Dr. Eilers was the founding President of the National Committee for Clinical Laboratory Standards. He was the first physician elected to the Board of Directors of the American Society for Testing and Material.

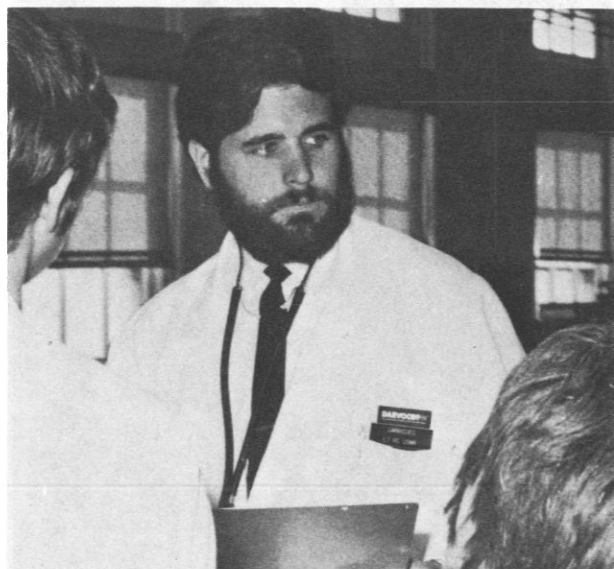
Dr. Eilers is presently Secretariat for the Americas of the International Commission for Standardization in Hematology. He is also Chairman, Council on Laboratory Improvement of the College of American Pathologists (CAP), and received the Pathologist-of-the-Year Award from the American Society of Clinical Pathologists (ASCP)/CAP in 1972.

During World War II, Dr. Eilers served as a Navy operating-room technician. He left the Navy in 1946 as a first class petty officer.

In his address to the graduates, Dr. Eilers stressed the many challenges which await them in their careers in laboratory medicine. He reminded the graduates that they must become involved with the issues that confront their profession today. These issues include the requirement for continuing education, decisions regarding involvement with the unionization movement, relationships with pathologists and hospital administrators, and the maintenance and improvement of the quality of patient care.

The 17 medical laboratory technicians graduated from a program affiliated with The George Washington University in Washington, D.C. This program gives the student the opportunity to earn as many as 49 semester hours of credit toward an Associate of Science degree in medical laboratory technique.

The five technologists graduated from the AMA-approved School of Medical Technology conducted by the NMTI. CAPT M.J. Valaske, MC, USN is Director of the School, and Chairman of the Department of Laboratory Medicine at NNMCMC, Bethesda.—PAO, National Naval Medical Center, Bethesda, Md. 🍀



FIRST NAVAL MEDICAL-SCHOLARSHIP GRADUATE.—LT Ned W. Garrigues, MC, USN is the first graduate to complete all four years of medical school under the current Navy Medical Scholarship Program. He is a member of the staff at NAVREGMEDCEN San Diego, Calif.

✠ In Memoriam ✠

CAPT James A. Addison, MC, USN (Ret.), died on 22 Mar in Washington, D.C. Born on 16 Jan 1916 in Shreveport, La., Dr. Addison received his BS degree from Centenary College in Shreveport, and his MD degree in 1942 from Louisiana State University Medical School in New Orleans. On 1 Aug 1942 he was commissioned an ENS, HVP (hospital voluntary, probationary).

After completing his internship, Dr. Addison was promoted to LT; from 1943 to 1945 he served as a battalion surgeon with the 2nd Marine Division, FMF, Pacific, at Tarawa, Tinian, and Saipan. From 1945 to 1946, he was a member of the staff at Nav Hosps Portsmouth, Va., and Parris Island, S.C. He completed the SONA (Student Officer Naval Administration) course at Stanford University, Calif., in 1946, and later that year attended the School of Tropical Medicine in Guam. Dr. Addison then served as senior medical officer in the civil administration unit, Palau Islands (1946-1948), and completed a residency in general practice at Nav Hosp Boston, Chelsea, Mass. (1948-1950).

Newly promoted to CDR, Dr. Addison became senior medical officer of Surgical Team 8, COMNAVFE, in 1950. During the Korean conflict in 1951, he became Commanding Officer of A Medical Company, 1st Marine Division, FMF, Pacific. Dr. Addison subsequently served as: senior medical officer, USN Dispensary, Sasebo, Japan (1951); ward medical officer, Nav Hosp Corpus Christi, Tex., (1951-1953); and training officer, Field Medical Service School, Camp Lejeune, N.C., (1953-1954). After one year of study at Senior School, Quantico, Va., Dr. Addison became CO of the 1st Medical Battalion, 1st Marine Division, Camp Pendleton, Calif., (1955-1956). From 1956 to 1957, he served as division surgeon, 3rd Marine Division, Okinawa. Dr. Addison was promoted to the rank of CAPT in 1956. He subsequently served in the Planning Division of the Bureau of Medicine and Surgery, until his retirement on 1 Sep 1971.

In addition to the Presidential Unit Citation with four stars, the Navy Unit Commendation, and the Navy Commendation Medal with Combat "V," CAPT Addison held the Asiatic-Pacific Campaign Medal with three stars and the Korean Service Medal with four stars.

He is survived by his widow, Vera, who lives at 5112 Southern Ave., S.E., Washington, D.C.

RADM Charles F. Behrens, MC, USN (Ret.), a pioneer in the field of atomic medicine, died in Annapolis, Md.,

on 21 Mar. Born in Philadelphia in 1896, Dr. Behrens graduated from the University of Pennsylvania Medical School in 1920. Upon graduation he was commissioned LT in the Navy Medical Corps.

Early in his Navy medical career, while serving as medical officer aboard the USS *Henderson*, Dr. Behrens participated in the Navy's initial studies of the Kahn precipitin test for syphilis. He then served with the Marines in Haiti (1929-1932), in the hospital ship USS *Relief* (1937-1938), and practiced general medicine at Nav Hosps Pensacola, Newport, and Brooklyn.

During WWII, Dr. Behrens was a member of the staff of the Navy Medical Center, Washington, D.C., where he developed the use of 35-millimeter photofluorography, for chest surveys and tuberculosis-control techniques. In 1947, he founded the Atomic Defense Division of BUMED, directing this division until 1951. During much of this time he was also CO of the Naval Medical Research Institute, Bethesda, Md.

Dr. Behrens was involved with radiological safety, establishment of procedures for clinical use of radioisotopes, and the introduction of photodosimetry. During WWII he represented the Navy on the Baruch Committee on Physical Medicine, and from 1951 to 1952



RADM Charles F. Behrens, MC, USN (Ret.), 1896-1974

he represented the Office of Naval Research on Project East River, a comprehensive study of civil defense. He also represented the Navy as councilor to the American College of Radiology.

After his promotion to RADM in 1951, Dr. Behrens was medical officer on the staff of the Eastern Sea Frontier in New York City. From 1953 until his retirement in 1956, he was the Sixth Naval District Medical Officer.

ADM Behrens was the author of numerous papers on radiology and internal medicine. In 1949 he wrote for, and edited *Atomic Medicine*, still used as a textbook. His second book, *After the A-Bomb*, written after he had witnessed the Eniwetok atomic-bomb tests in 1951, addresses the effects of radiation on the people of Nagasaki and Hiroshima, and analyzes emergency care following atomic blasts.

Upon his retirement from the Navy (36 years), Dr. Behrens joined the staff of the Yater Clinic in Washington, D.C., as a radiologist. He was in charge of the X-ray Department until his civilian retirement in 1966. He also served on the Radiation Protection Committee of the Bureau of Standards, and on the Tumor X-ray Therapy Board.

ADM Behrens was a Fellow of the American Council of Radiation, a Diplomate of the American Board of Radiology, and belonged to the New York Academy of Sciences. He is survived by a son, three daughters, 15 grandchildren and one great-grandchild.

VADM Joel T. Boone, MC, USN (Ret.), a Congressional Medal of Honor winner who served as physician to three Presidents, died at the National Naval Medical Center, Bethesda, Md., on 2 Apr. He was 84 years old.

VADM Boone was born in St. Clair, Pa., on 29 Aug 1889. He graduated from the Mercersburg Academy, Mercersburg, Pa., in 1909, and in 1913 received his MD degree from Hahnemann Medical College in Philadelphia. In 1914 he was appointed an assistant surgeon with the rank of LTJG in the Naval Reserve.

Dr. Boone was briefly a member of the staff of Nav Hosp Portsmouth, N.H., before beginning a course of instruction at the Naval Medical School in Washington, D.C. In May 1915 he transferred to the Regular Navy, serving at Naval Training Station, Norfolk, Va. Three months later he joined the Artillery Battalion, U.S. Marine Corps Expeditionary Force, and saw combat service ashore in Haiti.

In Sept 1916 Dr. Boone joined the USS *Wyoming*, serving in that battleship when the United States entered WWI in Apr 1917. He then joined the Sixth Regiment of Marines, arriving with them in France in early Oct



VADM Joel T. Boone, MC, USN (Ret.), 1889-1974



During WWI, Dr. Boone (second from right) served in Europe as a LT in the Navy Medical Corps. Many years later he became the first military medical officer to achieve three-star rank.

1917. As a Battalion and Regimental Surgeon, and later as Assistant Division Surgeon of the Second Army Division, American Expeditionary Forces, Dr. Boone participated in major battles and campaigns including the Defense Sector south of Verdun, Aisne, Aisne-Marne, St. Mihiel, Champagne, and Meuse-Argonne.

After the Armistice on 11 Nov 1918, with the Army of Occupation, he marched into Germany for duty on the Rhine bridgeheads.

For his services as surgeon in the Boise de Belleau, France, in Jun 1918, Dr. Boone was awarded the Distinguished Service Cross. He received the Nation's highest military award for bravery — the Congressional Medal of Honor — for heroism in action at Vierzy, France. The citation for the Medal of Honor reads in part: "With absolute disregard for personal safety, ever conscious and mindful of the suffering fallen, Surgeon Boone, leaving the shelter of a ravine, went forward onto the open field where there was no protection, and despite the extreme enemy fire of all calibres, through a heavy mist of gas, applied dressings and first aid to wounded Marines." Dr. Boone was also awarded the Silver Star with five Oak Leaf Clusters, and the Purple Heart with two Oak Leaf Clusters for services during WWI. He received special citations from GEN John J. Pershing, USA; MAJGEN John A. Lejeune, USMC; MAJGEN Harry Lee, USMC; MAJGEN Omar Bundy, USA; and MAJGEN James G. Harbord, USA.

After his return to the United States in Feb 1919, Dr. Boone served at BUMED in Washington, D.C., and as Director of the Bureau of Naval Affairs, American Red Cross. In May 1922 he became medical officer



VADM Boone had a lifelong interest in Navy Medicine. Visiting BUMED in 1955, several years after his retirement from active duty, he received a warm welcome.



At the celebration of the 99th anniversary of the Navy Medical Department in 1970, VADM Boone (center) renewed his friendship with former Navy Surgeons General RADM B.W. Hogan (left), and RADM H.L. Pugh (right).



In 1970, VADM Boone joined other medical leaders at the annual meeting of the Association of Military Surgeons of the United States (AMSUS). From left to right: (front row) LTGEN K.E. Pletcher, MC, USAF, Air Force Surgeon General; VADM G.M. Davis, MC, USN, Navy Surgeon General; VADM Boone; Dr. J.L. Steinfeld, Surgeon General, Public Health Service; COL W.A. Swanker, AUS (Ret.). (Back row) Dr. H. Marine Engle, Medical Director, Veterans Administration; BGEN F.A. Heimstra, MC, USAF; LTGEN H.B. Jennings, MC, AUS, Army Surgeon General; BGEN F.E. Wilson, AUS (Ret.), Executive Director, AMSUS.

aboard the Presidential yacht, *Mayflower*, where he served until 1929 as physician to Presidents Warren G. Harding and Calvin Coolidge. From 1929 to 1933 he was Physician to the White House during the administration of President Herbert Hoover.

In 1933 Dr. Boone completed a general postgraduate course at the Naval Medical School and joined the hospital ship *USS Relief* as Chief of medicine. From 1935

to 1936 he was a member of the staff at Nav Hosp San Diego, Calif., subsequently joining the Fleet Marine Force in San Diego. He later served as senior medical officer in the USS *Saratoga*, from 1938 to 1939.

After serving briefly as XO and CO of Nav Disp Long Beach, Calif., (Jul 1939-Jan 1940), Dr. Boone joined the staff of Commander Base Force, U.S. Fleet, serving in the flagship USS *Argonne* as Force Medical Officer. He subsequently became senior medical officer at Naval Air Station San Diego (1940-1943), and Medical Officer-in-Command of Nav Hosp Seattle, Wash., (1943-1945).

In Apr 1945 Dr. Boone became Third Fleet Medical Officer on the staff of ADM William F. Halsey. He was one of three officers selected to liberate Allied prisoners of war in Japan before the military occupation of that country, and was the Navy Medical Corps representative at the Japanese surrender ceremonies conducted aboard the USS *Missouri* in Tokyo Bay on 2 Sep 1945.

In Jan 1946, after two months of temporary duty at BUMED, Dr. Boone was designated the Eleventh Naval District Medical Officer, San Diego. Three months later he became Inspector of Medical Department Activities, Pacific Coast, with additional duty as Medical Officer, Western Sea Frontier; he was also Medical Advisor to the Federal Coal Mines Administrator, and Director of the Medical Survey of the Coal Industry, 1946-1947.

Early in 1948, Dr. Boone reported to the Secretary of Defense for duty as Executive Secretary of the Committee on Medical and Hospital Services of the Armed Forces. He simultaneously served as Secretary of the Committee on Federal Medical Services of the First Commission on Organization of the Executive Branch of the Government, commonly known as the Hoover Commission.

On 1 Sep 1949, Dr. Boone became Chief of the Joint Plans and Action Division, Office of Medical Services, Department of Defense. The following March, he was reassigned as General Inspector of Medical Department Activities, a position he held until his retirement. As General Inspector, ADM Boone was sent by the Chief of Naval Operations on a special mission to inspect Navy and Marine Corps medical facilities in the Pacific and Far East, including the fighting front of Korea. His

subsequent recommendation that helicopter landing platforms be built on hospital ships to speed evacuation of the wounded, helped save the lives of hundreds of combat troops fighting in Korea, and later in Vietnam.

Dr. Boone's name was placed upon the Permanent Physical Disability Retired List on 1 Dec 1950. Following his retirement from active military duty, he served four years as Chief Medical Director of the Veterans Administration.

VADM Boone was the most highly decorated physician in the history of Navy medicine. In addition to the Medal of Honor, Distinguished Service Cross, Silver Star, and two Purple Heart Medals, he held the Haitian Campaign Medal, Marine Corps Expeditionary Medal, WWI Victory Medal with six battle stars, and Army of Occupation Medal (Germany) for service prior to and during WWI. For service in WWII, he received a letter of commendation from the then Secretary of the Navy, James Forrestal, and was awarded the Secretary of the Navy's Commendation Medal. His other awards include: Bronze Star Medal with Combat "V," American Defense Service Medal with Fleet Clasp, Asiatic-Pacific Campaign Medal with two bronze stars, American Campaign Medal, WWII Victory Medal, Navy Occupation Medal (Japan), Korean Service Medal, United Nations Service Medal, National Defense Service Medal, and Republic of Korea Presidential Unit Citation Badge. The French Government bestowed upon him the Officer of the Legion of Honor award, Croix de Guerre with two palms, Order of the Fourragere (three awards), and the Gold Medal of Honor. The War Cross with Diploma of Italy was bestowed by that Government on Admiral Boone.

VADM Boone belonged to many medical, military, and academic organizations. He was a former President of the Association of Military Surgeons of the United States, and had represented the Navy as a member of the House of Delegates of the American Medical Association. He was a Fellow of the American College of Surgeons, American College of Physicians, International College of Surgeons, American College of Chest Physicians, and the AMA.

The Joel T. Boone Hall at Mercersburg Academy, dedicated 13 Oct 1962, was named in his honor. On 15 Mar 1972, the Joel T. Boone Clinic was dedicated at the Naval Amphibious Base, Little Creek, Va. (*U.S. Navy Medicine* 60(4):13-16, Oct 1972)

VADM Boone is survived by his wife, Helen, who resides at The Westchester, 3900 Cathedral Ave., N.W., Washington, D.C.

RADM Dwight Dickinson, Jr., MC, USN (Ret.), a specialist in neuropsychiatry whose career in Navy



The ADM Joel T. Boone Clinic was dedicated at US Naval Amphibious Base, Little Creek, Va., on 15 Mar 1972.

medicine spanned 37 years, died 17 Mar at the National Naval Medical Center, Bethesda, Md. He was 87 years old.

Dr. Dickinson was born in Jamestown, N.Y., on 2 Aug 1887. He was the son of Commodore Dwight Dickinson, MC, USN, who himself was a Navy physician for 40 years. After completing his undergraduate training at the Massachusetts Institute of Technology, RADM Dickinson attended Georgetown University School of Medicine, Washington, D.C., receiving his MD degree in 1909. In 1911 he was appointed Acting Assistant Surgeon in the U.S. Navy.

During WWI Dr. Dickinson was a battalion surgeon with the Second Battalion, Fifth Marine Regiment, 4th Brigade, American Expeditionary Forces. He participated in the St. Mihiel, Blanc Mont, Champagne, and Meuse-Argonne offensives in France, earning the Navy Cross and Distinguished Service Cross for extraordinary heroism in action near St. Etienne, and the Silver Star for services at Mont Blanc Ridge. He also accompanied the Army of Occupation to Germany.

In the early 1920s, during President Warren G. Harding's administration, Dr. Dickinson served aboard the Presidential yacht, the *Mayflower*. He subsequently served again as battalion surgeon with the Marine Corps during the Second Nicaraguan Campaign (1926-1933), operating in the mountains of northern Nicaragua against General Augusto Sandino and his revolutionary forces.

Dr. Dickinson also served in the USS *Ogala*, USS *Denebola*, and USS *Bainbridge*. He was a member of



RADM Dwight Dickinson, Jr., MC, USN (Ret.), 1887-1974.

the staff at BUMED, and at the Navy Yard in Washington, D.C.; at the Fleet Air Base in Pearl Harbor, Hawaii; and Nav Hosps Washington, Philadelphia, and Newport. In 1945 he was named to the BUMED Naval Examining and Retiring Board, a position he held until his retirement. Dr. Dickinson's name was placed on the Retired List on 1 Sep 1948 in the honorary rank of RADM.

RADM Dickinson was decorated with the Croix de Guerre by the Government of France, and with the Medallo de Merito by the Government of Nicaragua. He also held the WWI Victory Medal with three battle clasps, Army of Occupation Medal (Germany), Second Nicaraguan Campaign Medal, American Defense Service Medal, American Campaign Medal, and WWII Victory Medal.

Admiral Dickinson is survived by: his widow, Elizabeth, who resides at 2212 R St., N.W., Washington, D.C.; a son, John; a daughter, Anne; a sister; and two grandchildren.

CAPT Charles F. Lynch, DC, USNR (Ret.), a veteran of 29 years of Naval service, died on 9 Jan in New Orleans, La. Born in Schenectady, N.Y., on 1 Oct 1905, he graduated from Tufts College and received his D.M.D. degree from Harvard University.

Dr. Lynch was commissioned a LTJG in Jul 1930, and began his Navy career as assistant dental officer at the U.S. Naval Academy, Annapolis, Md. He served as dental officer in the USS *Chester* from Jan 1932 to Jun 1934, after which he returned to the Naval Academy as assistant dental officer. He became dental officer in the USS *Savannah* in 1938, and at the Navy Yard, Washington, D.C., in 1940.

From 1941 to 1945, Dr. Lynch served in an administrative capacity at the Bureau of Medicine and Surgery, Washington, D.C. He became Fleet Dental Officer for CINCPACFLT and COMSERVPAC in Feb 1945, and was promoted to the rank of CAPT one month later. CAPT Lynch attended the Naval War College from 1947 to 1948, after which he served one year in the Naval Medical Materiel Office. For five years (1949-1954) he was a member of the staff of the Planning Division of the Bureau of Medicine and Surgery, with additional duty at OPNAV and the Office of Naval Research. From 1954 until his retirement in 1959, he was Commanding Officer of NAVDENCLINIC, Camp Pendleton, Calif.

CAPT Lynch held the American Defense Service Medal with Fleet clasp, Asiatic-Pacific Campaign Medal, World War II Victory Medal, and National Defense Service Medal.

He is survived by his widow, Alice, who resides at 6550 Oakland Drive, New Orleans, La. 🇺🇸

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LAPFUL OF LOVE.—LTJG Mary Walters, NC, USNR rocks two Colombian children to sleep in the hospital ship *USS Sanctuary*. LT Walters was a member of the Navy health care team that made a month-long goodwill stop in Colombia last year as part of *Project HANDCLASP*. The two children underwent surgery aboard the *Sanctuary*.

U.S. NAVY MEDICINE